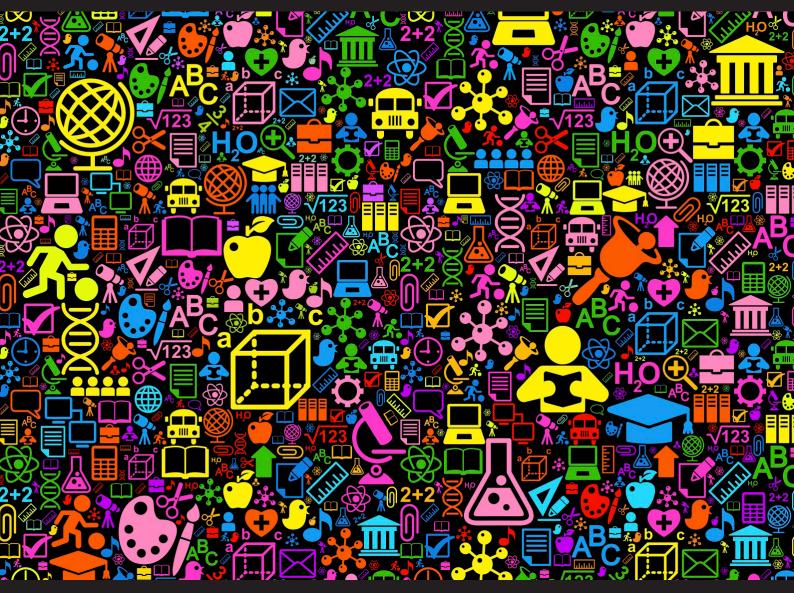
the iafor

journal of education

Volume 6 – Issue 2 – Summer 2018

Editor: Yvonne Masters



ISSN: 2187-0594



iafor

IAFOR Journal of Education Volume 6 – Issue 2 – Summer 2018

IAFOR Publications

The International Academic Forum

IAFOR Journal of Education

Editor

Yvonne Masters, University of New England, Australia

Associate Editors

Lynda Leavitt, Lindonwood University, USA Massoud Moslehpour, Asia University, Taiwan Raimond Selke, Goethe-Institut Jakarta, Indonesia

Published by The International Academic Forum (IAFOR), Japan IAFOR Publications, Sakae 1-16-26-201, Naka-ward, Aichi, Japan 460-0008

Executive Editor: Joseph Haldane Editorial Assistance: Nick Potts

IAFOR Journal of Education Volume 6 – Issue 2 – Summer 2018

Published June 1, 2018

IAFOR Publications © Copyright 2018 ISSN: 2187-0594

ije.iafor.org

IAFOR Journal of Education

Volume 6 – Issue 2 – Summer 2018

Edited by Yvonne Masters

Table of Contents

From the Editor Yvonne Masters	1
Notes on Contributors	2
A Comparative Analysis of the Attitudes of Primary School Students and Teachers Regarding the Use of Games in Teaching Branko Anđić Srđan Kadić Rade Grujičić Desanka Malidžan	5
Historically Black Colleges and Universities' Mentorship of Health Profession Students: A Content Analysis Exploring the North Carolina Health Careers Access Program Kaye Thompson-Rogers Dannielle Joy Davis Denise Davis-Maye Claudine Turner	17
Examining the Effects of Reflective Journals on Students' Growth Mindset: A Case Study of Tertiary Level EFL Students in the United Arab Emirates Hinda Hussein	33
School Administrators' Competencies for Effective English Language Teaching and Learning in Thai Government Primary Schools Singhanat Nomnian Thithimadee Arphattananon	51
Home Environment of Selected Filipino Gifted Individuals Greg Tabios Pawilen	71
Reviewers	91
Guide for Authors	92

From the Editor

Dear Readers.

This second issue of the *IAFOR Journal of Education* for 2018 continues to respond to the IAFOR call to be international, intercultural and interdisciplinary. The five articles display the research being undertaken from a range of locations: Montenegro, the Philippines, Thailand, the United Arab Emirates, and the United States. While the contexts are different, the themes are relevant to educators globally.

As with locations, the articles in this issue again cover a range of themes: the use of games in teaching; mentorship in historically Black colleges and universities to assist in acceptance to health career courses; reflective journals as a strategy to assist in the development of a growth mindset; the competencies required by school administrators to assist in effective language teaching and learning; and the importance of home environment in the development of gifted Filipino students. The topics reflect the diversity of issues in the broad nature of education.

We hope that you enjoy these articles, find application for them in your own contexts, and consider sharing your own research and experiences in the journal. The next issue is due to be published on December 1, 2018.

Yvonne Masters Editor, IAFOR Journal of Education, ije.iafor.org

Notes on Contributors

Article 1: A Comparative Analysis of the Attitudes of Primary School Students and Teachers Regarding the Use of Games in Teaching

Mr Branko Anđić is a PhD student in the Faculty of Natural Sciences and Mathematics Podgorica at the University of Montenegro, Montenegro. His research areas are biology education, motivation, environmental education, and digital education.

Email: brankoan@yahoo.com

Dr Srđan Kadić is an Assistant Professor in the Faculty of Natural Sciences and Mathematics Podgorica at the University of Montenegro, Montenegro. He teaches courses in mathematics and computer science. His research areas are information and communication technologies, computer graphics and visualization, and software engineering.

Mr Rade Grujičić is an Assistant at in the Faculty of Mechanical Engineering Podgorica at the University of Montenegro, Montenegro. His research areas are information and communication technologies, robotics, and mechanics.

Ms Desanka Malidžan is a biology teacher at "Radojica Perović" Podgorica, Montenegro. She is the author of biology textbooks for primary schools in Montenegro.

Article 2: Historically Black Colleges and Universities' Mentorship of Health Profession Students: A Content Analysis Exploring the North Carolina Health Careers Access Program

Dr Kaye Thompson-Rogers has been employed with North Carolina Central University (NCCU) in Durham, North Carolina since 1996, where she is the Director of the Health Careers Center and the North Carolina-Health Careers Access Program (NC-HCAP). Her research interests are Black women in academia, Black women and beauty, African American women and barriers in academe, Black women and health disparities, as well as Blacks and voting rights amendments.

Email: krogers@nccu.edu

Dr Dannielle Joy Davis is a tenured Associate Professor of Higher Education at Saint Louis University. She is the first known African American woman to earn tenure in the history of the institution's School of Education. A graduate of the University of Illinois at Urbana-Champaign, she has studied and conducted research in Ghana, South Africa, Senegal, Egypt, Germany, the Netherlands, and Belgium. Her interdisciplinary research examines the experiences of marginalized groups in educational settings, as well as spirituality in the workplace and other learning environments. She has published over 60 refereed journal articles, book chapters, volumes, academic commentaries, and reviews.

Email: djdavis@slu.edu

Dr Denise Davis-Maye, a licensed independent clinical social worker, is a native of New York City who spent most of her formative years in the South Bronx and Harlem. A Professor with primary responsibilities in the MSW program, she has over 26 years of experience in Social Work practice, Dr Davis-Maye is an alumna of Clark Atlanta University. Her research interests include the cultural, community and familial impact on the emotional development of adolescent girls of African descent, as well as emotional and physiological health disparities and their influence on the well-being of women and girls of color.

Email: ddavisma@aum.edu

Article 3: Examining the Effects of Reflective Journals on Students' Growth Mindset: A Case Study of Tertiary Level EFL Students in the United Arab Emirates

Mrs Hinda Hussein is a Lecturer in General Studies in the Higher Colleges of Technology in the UAE. She has 20 years of experience both in the UAE and the US. A large part of her teaching responsibilities focus on EFL learners. Hinda is currently pursuing a PHD in Education in Management, Leadership & Policy. Her research interests are in teaching and learning, CLIL, leadership and policy in education and educational technology. Email: hhussein1@hct.ac.ae

Article 4: School Administrators' Competencies for Effective English Language Teaching and Learning in Thai Government Primary Schools

Associate Professor Dr Singhanat Nomnian completed an EdD TESOL and Applied Linguistics degree at the University of Leicester, UK, and Advanced Specialist Certificate in Language Assessment at RELC, Singapore. He was an Endeavour Postdoctoral Fellow at the University of Technology Sydney (UTS), Australia. He is currently the chair of an MA in Language and Intercultural Communication at the Research Institute for Languages and Cultures of Asia, Mahidol University in Thailand. His research interests include Global Englishes, ESP, EAP, intercultural communication, multilingualism, and sociolinguistics. He also serves as a Thailand TESOL executive committee member.

Assistant Professor Dr Thithimadee Arphattananon received her PhD in Education Administration from the University of Wisconsin-Madison. Currently, she is affiliated with the PhD Program for Multicultural Studies, Research Institute for Languages and Cultures of Asia, Mahidol University, Thailand. Her research focus is education for culturally diverse students. Email: thithimadee@yahoo.com.

Article 5: Home Environment of Selected Filipino Gifted Individuals

Dr Greg Tabios Pawilen is an Associate Professor at the College of Human Ecology of the University of the Philippines Los Banos. His research interest focuses on curriculum studies, science education, early childhood education, indigenous science, teacher education, and gifted education. Some of his research works have been published in academic journals and books in Japan, India, UK, Brunei, South Korea, Australia, and in the Philippines.

Email: gtpawilen@up.edu.ph

Email: snomnian@hotmail.com.

A Comparative Analysis of the Attitudes of Primary School Students and Teachers Regarding the Use of Games in Teaching

Branko Anđić University of Montenegro, Faculty of Natural Sciences and Mathematics Podgorica, Montenegro

Srđan Kadić University of Montenegro, Faculty of Natural Sciences and Mathematics Podgorica, Montenegro

Rade Grujičić University of Montenegro, Faculty of Mechanical Engineering Podgorica, Montenegro

> Desanka Malidžan School "Radojica Perović", Podgorica, Montenegro

Abstract

This paper provides an overview of the attitudes of students and teachers toward the use of educational games in the teaching process. The study encompassed a didactic experiment, and adopted interviewing techniques and theoretical analysis. Likert distributions of attitudes to particular game types are presented in tables and the arithmetic means of Likert values are used as indicators of centrality. Spearman's rank correlations between teaching and student attitudes are also discussed. The research has shown that word associations, memory games, anagrams and quizzes are games that enhance students' motivation the most, whereas crosswords and rebuses have been found to be least interesting. Teachers, on the other hand, find that self-made games are better than ready-made games, as they inspire creativity in teaching.

Keywords: educational games, teaching, motivation, primary school, students, teachers

Introduction

For children, most learning comes from play, which is their most natural activity. As many as 91% of American children between the ages of 2 and 17 play video games (NPD Group, 2011). The Entertainment Software Association (2012) states the following reasons for playing games: they are fun, challenging, they bring families and friends together and provide entertainment.

Educational games are games used for educational purposes. There are numerous definitions of educational games. However, one of the generally accepted definitions is that a game is a system in which players engage in an artificial conflict, defined by rules, which results in a quantifiable outcome (Salen & Zimmerman, 2004). The strategy of educational games is to place students in situations where a competitive spirit and intelligence need to be brought into play. Students are guided by the competitive spirit towards gaining a certain knowledge which helps them win the game and, at the same time, relieves stress and provides additional motivation.

Many scientists believe that educational games make up an important area of research in the field of developmental psychology (Erikson, 1977; Piaget, 1962; Vygotsky, 1978). The characteristics of every educational game should be as follows: clear goals and objectives, opportunity to apply what is being learned, ensuring that the learner can only succeed in the game if they have the required knowledge, learning based on experience, providing immediate feedback on the results achieved, encouragement to learn from mistakes, enabling cooperation, presenting challenges tailored to students' abilities, the visual appearance, and animations that help maintain learner's attention (Fischer, 2005; Kelly, 2005; Prensky, 2002). One of the most important features of educational games lies in considering wrong answers as part of the cognitive process and the possibility for a student to learn from their own mistakes (Groff, Howells, & Cranmer, 2010; Ke, 2009; Klopfer, Osterweil, & Salen, 2009). Many research studies have shown that games are a great motivational tool in learning (Chang, Yang, Chan, & Yu, 2003; Schwabe & Goth, 2005). However, as the selection of activities and games depends on the teaching that is carried out by a teacher, it is necessary to analyze the teachers' opinions on educational games.

Apart from being used as a teaching technique geared towards acquisition of knowledge, a game is also a highly motivational tool for better learning, and a tool for affirmation and expression of students' attitudes. In fact, a game shapes the content of a course, stimulates cognitive abilities and makes otherwise boring contents interesting (Facer, 2003; Prensky, 2003). A successful educational process entails not only motivated students, but also motivated teachers. It is therefore important to allow teachers to independently create teaching materials for teaching classes including educational games. If a teacher is highly motivated then so are their students, and the teaching process overall is better (Maehr, 1984). Some research studies have shown that teachers are motivated when they see students achieving desirable results (Lortie, 1975; Menlo & Low, 1988). One of the important factors that determines teachers' motivation level is the selection of, and access to, contemporary teaching aids (Namestovski, 2013).

The majority of previous research studies have revolved around the use of ready-made software games in classrooms. This study seeks to analyze the possibilities for teachers to design educational games on their own and adjust them to the needs and abilities of students, as well as to the lesson plan. The aim of this research is to assess the capacities of teachers to create

self-made games, the impact of such games on students' motivation level, and their role as a complement to theoretical knowledge. In addition, one of the main objectives of this research study is to describe the games that motivate students the most from those considered to be least interesting. Previous research studies have not sufficiently tackled teachers' attitudes toward educational games, which is why this paper provides a comparison of teachers' and students' opinions on the use of educational games in teaching.

Materials and Methods

An experiment was conducted with both teachers and students to explore their attitudes to educational games designed by teachers. The part of the experiment that involved teachers as a target group entailed practical training on the creation of educational games, followed by a survey. The practical training for teachers, entitled "Using educational games in the classroom", was approved by the Institute of Education of Montenegro, and listed in the Catalogue for the Professional Training of Teachers for the school year 2015–2016 (Institute of Education of Montenegro, 2015). As many as 270 teachers from 8 Montenegrin primary schools underwent the practical training. Out of the said total number, 148 teachers (54.8%) teach classes to younger children between the ages of 6 and 11, whereas 122 of their peers (44.2%) teach pupils in the upper elementary grades between the ages of 11 and 15. After completing the training, the teachers went on to apply the skills for creating games in their classrooms. The teachers conveyed their attitude regarding the use of these games in teaching through a survey. After the classes involving educational games were delivered, the students who were learning through play were also surveyed. A total of 428 pupils were surveyed, 217 (50.08%) being those between the ages of 6 and 11, while 221 (49.02%) were pupils aged 11– 15. The research involved students from city schools in Montenegro. The students who participated in the survey were of similar social status. A flowchart of the research process is presented in Figure 1.

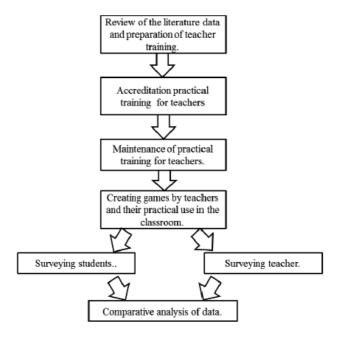


Figure 1: The layout of the research study stages.

Games used in the research

For the purpose of this research, the following educational games that teachers can create on their own were chosen: rebuses, anagrams, crosswords, word associations, memory games, quizzes and "Break the Wall". Rebus is an educational game that engages students' logical thinking, combinatorics, linking of concepts, and helps transform explicit into experiential knowledge. The solutions to rebuses are meaningful notions that are reached through conversion of characters and images into words. An anagram is a type of letter-rebus educational game which requires that a meaningful notion be figured out from an illogical combination of words. With crosswords, answers to questions are entered in a grid. Word association is an educational game in which an associative pattern between concepts leads to the solution to the game. A memory game requires students to locate and pair up several hidden notions, hidden notions with images or several associated images. A quiz is an educational game in which students opt for one of the offered answers to a question. An impact of quizzes in the teaching process is not clarified so far, so additional research in this direction is needed (Wang, Øfsdal, & Mørch-Storstein, 2009). "Break the wall" is a game in which an image is hidden behind a set of questions. With each correct answer, another brick gets torn down, thus uncovering a part of the image. The aim is to provide as many correct answers as possible, so as to unveil the entire image. The teachers were trained to use Microsoft PowerPoint for designing all of the abovementioned games, so that they could, at any point in time, independently design games and use them to achieve lesson goals.

The survey

The survey for teachers comprised 12 questions, 8 closed-ended and 4 open-ended questions. The closed-ended questions pertained to teachers' evaluations of each game and its purpose as a motivational teaching aid, as well as its benefits and disadvantages. The games were rated on a scale of 1 to 5. In the open-ended questions, teachers were asked to write down suggestions on how to improve the use of educational games in classrooms, and on which parts of a class these games would be most suitable for. The survey for students contained 8 closed-ended questions in which students were to rate each game, as well as 4 open-ended questions asking for their suggestions for the further use of educational games.

Data processing

The results obtained through the study are presented in tables and a graph. Statistical processing of data involved calculation of the arithmetic mean of Likert values and correlation coefficients between teacher and student Likert returns. Likert results obtained served as input data for calculating Spearman's correlation coefficient, and in this case, they represent the extent to which quantitative assessments provided by teachers match those provided by students. Finally, the said results were compared to other published findings by students. Finally, the said results were compared to other published findings.

Results and Discussion

Of the total of 270 teachers, 67 (23.7%) had already used the existing computer-based educational games in classroom teaching, whereas 203 (76.3%) had never used them. The survey has shown that 165 (61%) teachers find their schools to be technically equipped for the use of educational games in teaching, whereas 135 (39%) believe the opposite. The majority of teachers, 228 (84.4%), claim that they will be using educational games in classrooms on a regular basis, owing to the positive experience gained through such activities, whereas 42 (15.6%) say otherwise.

The opinions of teachers on self-made educational games used in the teaching process are presented in Table 1.

Table 1: Attitudes of teachers toward games as being a motivational factor (5=Excellent, 4=Good, 3=Average, 2=Below Average, 1=Poor)

Question:	Answers:									
How would you rate		1 2		3			4		5	
educational games as a means	n	%	n	%	n	%	n	%	n	%
for increasing students'	0	0	0	0	8	2.96	101	37.41	161	59.63
motivation for the teaching										
process?										
How would you rate the		1		2		3	,	4		5
"associations" game as a	n	%	n	%	n	%	n	%	n	%
means for increasing students'	0	0	0	0	3	1.11	89	32.96	178	65.93
motivation for the teaching										
process?										
How would you rate the		1		2		3		4	:	5
"memory" game as a means	n	%	n	%	n	%	n	%	n	%
for increasing students'	0	0	2	0.74	16	5.93	123	45.56	129	47.78
motivation for the teaching										
process?										
How would you rate the		1		2		3	,	4		5
"quiz" game as a means for	n	%	n	%	n	%	n	%	n	%
increasing students'	0	0	0	0	5	1.85	11	4.07	254	94.07
motivation for the teaching										
process?										
How would you rate the		1		2		3		4		5
"Break the wall" game as a	n	%	n	%	n	%	n	%	n	%
means for increasing students'	0	0	6	2.22	17	6.30	128	47.41	119	44.07
motivation for the teaching										
process?								ļ.		
How would you rate the		1		2		3		4		5
"anagram" game as a means	n	%	n	%	n	%	n	%	n	%
for increasing students'	18	6.67	34	12.59	72	26.67	89	32.96	57	21.11
motivation for the teaching										
process?		1		2				4		
How would you rate the		1		2		3		4		5
"rebus" game as a means for	n	%	n	%	n	%	n	%	n	%
increasing students'	8	2.96	13	4.81	34	12.59	96	35.56	119	44.07
motivation for the teaching										
process?		1						4		<u> </u>
How would you rate the		1		2		3		4		5
"crosswords" game as a	n	%	n	%	<u>n</u>	%	n	%	n	%
means for increasing students'	9	3.33	17	6.30	54	20	124	45.93	66	24.44
motivation for the teaching										
process?										

The average grade that teachers have assigned to educational games serving as a motivational factor in teaching is 4.56. Out of a total of 270 teachers who have undergone training for self-made games to be used independently in the classroom, 161 (59.6%) found educational games to be a very good motivational tool, marking them with the highest grade. The lowest grade assigned to games as being a motivational tool was a Likert category of three (3), assigned by 8 or 2.96% teachers. These attitudes of the teachers are consistent with those expressed in previous research studies in this area (Gee, 2001; Kebritchi, Hirumi, & Bai, 2010; Liu & Chu, 2010; Woo, 2014; Yang, 2012). Students find learning through play to be very interesting,

giving it an average grade of 4.77. As many as 332 (77.57%) students rated the interest-triggering aspect of games with the highest grade, whereas 96 (22.42%) assigned the grade of four (4), being the lowest grade overall. Table 2 provides the review of students' opinion on games.

Table 2: Attitudes of students on the use of games in teaching (5=Excellent, 4=Good, 3=Average, 2=Below Average, 1=Poor)

Question:	Answers:									
How interesting do you find	1		2		3		4		5	
the use of games in classroom	n	%	n	%	n	%	n	%	n	%
teaching?	0	0	0	0	0	0	96	22.43	332	77.57
How interesting do you find	1		2		3		4		5	
the "word association" game	n	%	n	%	n	%	n	%	n	%
to be?	0	0	0	0	23	5.37	221	51.64	184	42.99
How interesting do you find		1		2		3	4	4	5	
the "memory" game to be?	n	%	n	%	n	%	n	%	n	%
	0	0	0	0	0	0	156	36.45	272	63.55
How interesting do you find	1		2		3		4		5	
the "quiz" game to be?	n	%	n	%	n	%	n	%	n	%
	0	0	0	0	28	6.54	157	36.68	243	56.78
How interesting do you find		1		2		3	4	4		5
the "Break the wall" game to be?	n	%	n	%	n	%	n	%	n	%
	0	0	12	2.80	0	0	223	52.10	193	45.09
How interesting do you find	1		2		3		4		5	
the "anagram" game to be?	n	%	n	%	n	%	n	%	n	%
	0	0	0	0	2	0.47	134	31.31	292	68.22
How interesting do you find	1		2		3		4		5	
the "rebus" game to be?	n	%	n	%	n	%	n	%	n	%
	29	6.78	56	13.08	12	2.80	243	56.78	88	20.56
How interesting do you find		1		2		3	4	4	:	5
the "crosswords" game to be?	n	%	n	%	n	%	n	%	n	%
	24	5.61	37	8.64	82	19.16	148	34.58	137	32.01

According to the teachers, the best motivation-triggering game is the quiz game, giving it the 4.92 score, while students rated it with 4.50. This educational game is a very good motivational tool in the teaching process, a conclusion that follows up on the results from the previous studies such as Wang, Øfsdal, & Mørch-Storstein (2008) and Anđić & Malidžan (2015). Teachers find anagrams to be least motivational, assigning an average grade of 3.47, whereas students described this game as a very interesting one, giving it a score of 4.68. The data from the relevant literature correlate with the students' opinion, describing anagram as a very good motivational tool (Deci, 1991; Melero & Hernández-Leo, 2014). The students surveyed found the rebus game to be least interesting, giving it an average score of 3.74 while the teachers' score was 4.12. Some research studies have shown that the rebus game helps pupils master the skill of reading in an interest-inducing manner (U.S. Department of Education, 2005).

For classroom teaching with educational games to be successful, a balance needs to be struck between the games that educators find to be motivational and those that students find to be appealing. By using a Spearman's rank correlations coefficient, a comparison of teachers' and students' ranks (1 to 5; n=5) frequencies is made for each game. This research reveals a high correlation between opinions of teachers and students when it comes to games such as quizzes, word associations, memory games and crosswords, the Spearman's correlation coefficient being ρ =0.90. A lower Spearman's coefficient of correlation between opinions of teachers and

students was recorded with rebuses, anagrams and "Break the Wall," and amounts to ρ =0.70 or less. The overall correlation of opinions for each question is presented in Graph 1. The teacher-student responses Spearman's correlation coefficient is fairly high, and its average value in this research amounts to ρ_{avr} =0.85.

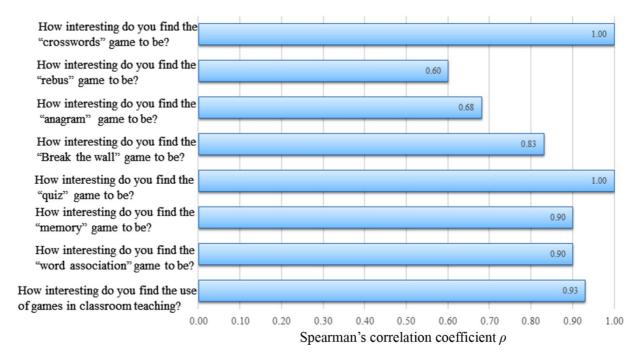


Figure 2: Educational games in teaching – the Spearman's correlation coefficient ρ between opinions of teachers and students (n=5 for each game).

In the open-ended questions of the survey, students and teachers were to provide answers in their own words. When asked about the shortcomings of educational games in teaching, teachers stated the lack of IT equipment, preparation of games as being time-consuming, and computer illiteracy. The lack of IT equipment in schools in developing countries has been noted in the report "ICTs and Education" (UNESCO Institute for Statistics, 2006). The promotion of computer literacy and use of computers in teaching has been designated as one of the priorities in the report "Conclusions and recommendations to UNESCO and CEI" for the entire Southeastern Europe (UNESCO, 2006). The time-consuming preparation of games to be used in teaching has to do with the moderate computer literacy of teachers who underwent the training for designing games. Students do not see educational games as having any shortcomings whatsoever, and think they should be used as much as possible in classroom teaching. Both students and teachers believe that games can be used during any part of a single class, as well as both in the course of introducing a new lesson and while reviewing previous ones.

When asked about other ways to induce motivation with students, teachers mostly stated the use of computers, outdoor classes and more advanced teaching aids. In addressing the very same question, students responded with: classroom experiments, practical work and the use of computers. Both groups of respondents agree that use of computers in classrooms induces motivation as a number of papers have shown (Dale, 2008; Mellar et al., 2007; Strzebkowski & Kleeberg, 2002; Turvey, 2006). Teachers also give preference to creating games themselves, as it is thus easier to tailor them to the lessons being taught, as well as to students' capabilities,

whereas fewer teachers feel that ready-made games would be more suitable to them, mostly due to the reason of time-saving.

The Implications of Educational Games in the Teaching Process

Educational games impact positively on the teaching process and encourage greater motivation for learners for learning. Students have different attitudes about different games which significantly affect the success of the teaching process. Therefore, each teacher of the game should adapt primarily to the teaching content, but also to the students for whom the games are intended. In this way, it is likely to achieve the best pedagogical and educational benefits of educational games.

Conclusion

This research has shown that educational games serve as a solid motivational tool. In addition, there is a high level of correlation between opinions of teachers and students on educational games, with Spearman's correlation coefficient of ρ =0.85. The average grade that students assigned to educational games to be used in classroom teaching amounts 4.77, whereas teachers gave an average grade of 4.65. From the students' perspective, the best games used in classroom teaching are word associations, memory games, anagrams and quizzes, whereas crosswords and rebuses have been said to be least interesting. When comparing games that teachers create and adjust themselves with ready-made educational games, the preference has been given to the former, since teachers thus have the freedom to customize the games to the lessons being taught, as well as to students' capabilities. Future research studies should be directed toward the development of educational software that enable teachers to use games that are adapted to the material being taught and to students' capacities.

References

- Anđić, B., & Malidžan, D. (2015). Educational game quiz as a motivational tool in the biological education. 6th International Symposium of Ecologists of Montenegro. Ulcinj, Montenegro, 15–18 October 2015.
- Chang, L.J., Yang, J. C., Chan, T. W., & Yu, F. Y. (2003). Development and evaluation of multiple competitive activities in a synchronous quiz game system. *Innovations in Education and Teaching International*, 40(1), 16–27. https://doi.org/10.1080/1355800032000038840
- Dale, C. (2008). iPods and Creativity in Learning and Teaching: An Instructional Perspective. *International Journal of Teaching and Learning in Higher Education*, 20, 1–9.
- Deci, E. L., Vallerand, R. J., Pelletie, L. G., Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26(3–4), 325–346. http://dx.doi.org/10.1207/s15326985ep2603&4 6
- Entertainment Software Association. (2012). Essential facts about the computer and video game industry. Retrieved from www.theesa. com/facts/pdfs/ESA EF 2012.pdf.
- Erikson, E.H. (1977). *Toys and reasons: Stages in the ritualization of experience*. New York, NY: Norton.
- Facer, K. (2003). *Computer games and learning*. Retrieved August 27, 2007, from http://www.futurelab.org.uk/resources/documents/discussion_papers/Computer_Games_and_Learning_discpaper.pdf
- Fisch, S. M. (2005). Making educational computer games "educational". In *Proceedings of the 2005 conference on interaction design and children* (pp. –61). Boulder, Colorado.
- Gee, J.P. (2001). Progressivism, critique, and socially situated minds. In C. Dudley Marling, & C. Edelsky (Eds.). *The fate of progressive language policies and practices* (pp. 31–58). Urbana, IL: NCTE,
- Groff, J., Howells, C., & Cranmer, S. (2010). *The impact of console games in the classroom:* Evidence from schools in Scotland. UK: Futurelab.
- Institute of Education of Montenegro (2015). Katalog programa stručnog usavršavanja nastavnika za školsku 2015/2016. godinu [Catalog of professional teacher training program for school 2015/2016 year].
- Ke, F. (2009). A qualitative meta-analysis of computer games as learning tools. In R. E. Furdig (Ed.), *Handbook of research on effective electronic gaming in education* (pp. 1–32). New York: IGI Global.
- Kebritchi, M., Hirumi, A., & Bai, H. (2010). The effects of modern mathematics computer games on mathematics achievement and class motivation. *Computers & Education*, 55(2), 427–443. https://doi.org/10.1016/j.compedu.2010.02.007
- Kelly, H. (2005). Games, cookies, and the future of education. *Issues in Science & Technology*, 21(4), 33–40.
- Klopfer, E., Osterweil, S., & Salen, K. (2009). *Moving learning games forward*. Cambridge, MA: The Education Arcade.
- Liu, M., & Rutledge, K. (1997). The effect of a "learner as multimedia designer" environment on at-risk high school students' motivation and learning of design knowledge. Journal

- of Educational Computing Research, 16, 145–77. https://doi.org/10.2190/27AT-YLJ3-3PVV-L0JY
- Liu, T. Y., & Chu, Y. L. (2010). Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation. *Computers & Education*, 55(2), 630–643. https://doi.org/10.1016/j.compedu.2010.02.023
- Lortie, D. C. (1975). Schoolteacher. Chicago: University of Chicago Press.
- Maehr, M. L. (1984). Meaning and motivation: Toward a theory of personal investment. In R. E. Ames, & C. Ames (Eds.), *Research on motivation in education* (pp. 115–144). New York: Academic Press, Inc.
- Melero, J., & Hernández-Leo, D. (2014). A model for the design of puzzle-based games including virtual and physical objects. *Educational Technology & Society*, 17(3), 192–207.
- Mellar, H., Kambouri, M., Logan, K., Betts, S., Nance, B., Moriarty V. (2007). *Effective teaching and learning: Using ICT*. Research report for NRDC. ISBN: 9781905188338.
- Menlo, A., & Low, G. T. (1988). A comparison of the sources of enthusiasm in teaching across five countries. Paper presented at the *Society for cross cultural research annual meeting*. Texas, USA.
- Namestovski, Z. (2013). Analysis of the effects of applying educational software tools on pupils' and teachers' motivation level in primary schools. (Unpublished doctoral dissertation). University of Novi Sad, Serbia.
- NPD Group (2011). The video game industry is adding 2-17-year-old gamers at a rate higher than that age group population growth. Retrieved October 03, 2016, from http://www.afjv.com/news/233 kids- and- gaming- 2011.htm.
- Piaget, J. (1962). Play, dreams and imitation (Vol. 24). New York, NY: Norton.
- Prensky, M. (2002). The motivation of gameplay: The real twenty-first century learning revolution. *On the Horizon*, 10(1), 5–11. https://doi.org/10.1108/10748120210431349
- Prensky, M. (2003). Digital game-based learning. *ACM Computers in Entertainment, 1*(1), 1–4. https://doi.org/10.1145/950566.950596
- Salen, K., & Zimmerman, E. (2004). *Rules of play: Game design fundamentals*. Cambridge, MA: MIT Press.
- Schwabe, G., & Goth, C. (2005). Mobile learning with a mobile game: design and motivation effects. Journal of Computer Assisted Learning, 21(3), 204–2016. https://doi.org/10.1111/j.1365-2729.2005.00128.x
- Strzebkowski, R., & Kleeberg, N. (2002). *Interaktivität und Präsentation als Komponenten multimedialer*. Lernanwendungen. In Information und Lernen mit Multimedia und Internet; BeltzPVU: Weinheim, Germany, 229–246.
- Turvey, K. (2006). Towards deeper learning through creativity within online communities in primary education. *Computers & Education*, 46, 309–321. https://doi.org/10.1016/j.compedu.2005.11.004
- U.S. Department of Education (2005). *Helping your child become a reader*. U.S. Department of Education Office of Communications and Outreach. Jessup, MD.
- UNESCO (2006). *Conclusions and recommendations to UNESCO and CEI*. Workshop on Information Literacy Initiatives for Central and South East European Countries.

- International Center for Promotion of Enterprises Ljubljana, Slovenia, March 27-28, 2006.
- UNESCO Institute for Statistics (2006). *ICTs and education indicators Suggested core indicators based on meta-analysis of selected international school surveys*. Communication Statistics Unit UNESCO Institute for Statistics CP6128 Succursale Centreville Montreal H3C 3J7, Québec, Canada.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological functions*. Cambridge, MA: Harvard University Press.
- Wang, A. I., Øfsdal, T., & Mørch-Storstein, O.K. (2008). An evaluation of a mobile game concept for lectures. In *Proceedings of 21st conference on software engineering, education and training* (pp. 197–204). IEEE Computer Society. http://doi.ieeecomputersociety.org/10.1109/CSEET.2008.15
- Wang, A. I., Øfsdal, T., & Mørch-Storstein, O.K. (2009). Collaborative learning through games characteristics, model, and taxonomy, Retrieved October 03, 2016, from http://www.idi.ntnu.no/grupper/su/publ/alfw/LectureGameTaxonomyPaper.pdf
- Woo, J. C. (2014). Digital game-based learning supports student motivation, cognitive success, and performance outcomes. *Educational Technology & Society*, *17*(3), 291–307.
- Yang, Y. T. C. (2012). Building virtual cities, inspiring intelligent citizens: Digital games for developing students' problem solving and learning motivation. *Computers & Education*, 59(2), 365–377. https://doi.org/10.1016/j.compedu.2012.01.012

Corresponding author: Branko Anđić Contact email: brankoan@yahoo.com

Historically Black Colleges and Universities' Mentorship of Health Profession Students: A Content Analysis Exploring the North Carolina Health Careers Access Program

Kaye Thompson-Rogers North Carolina Central University, USA

> Dannielle Joy Davis Saint Louis University, USA

Denise Davis-Maye Alabama State University, USA

Claudine Turner Sisters of the Academy Institute, USA

Abstract

The medical profession, as well as allied health careers, in the United States continues to experience a lack of diversity in terms of the number of African Americans practicing in these fields. This work highlights a postsecondary program developed to increase the population of Black physicians and health care workers throughout the nation: the North Carolina Health Careers Access Program. Data from this study centers upon multi-year evaluation reports and journaling. Mentoring serves as the conceptual framework in interpreting content analysis of these reports and the current program director's reflective notes. Recommendations for practice center upon mentor training and cultivating stronger program mentoring relationships between students, faculty, and staff.

Keywords: mentoring, mentor model, HBCU, medical school admission, health careers

Introduction

Historically Black colleges and universities (HBCUs) emerged to meet the education and training needs of traditional African American students previously excluded from higher education in the United States. These postsecondary institutions became centers of higher learning that both educated and prepared group members to be contributors to their communities and the nation, and emphasized contributions their communities made (Cantey, Bland, Mack, & Davis, 2011; Gasman, Nguyen, & Conrad, 2015). This paper describes the North Carolina Health Careers Access Program (NC-HCAP) at a historically Black college and university (HBCU) located in North Carolina. The NC-HCAP program prepares minority students in science, technology, engineering, mathematics (STEM) and pre-health fields to be more competitive applicants when applying to medical schools, graduate and professional programs. The purpose of this study centers upon offering a potential model for similar mentoring efforts via review of the program history and outcomes of the featured initiative.

Literature Review

Research suggests that cultural environments employing a nurturing, supportive, family-like atmosphere supports the academic and personal growth of students which contributes to student academic success (Kendricks, Nedunuri, & Arment, 2013). HBCUs have cultivated this kind of environment and, as a result, have emerged as leaders in professional development and matriculation of students into the health professions (Li, 2007). According to the U.S. Census Bureau (2017), minorities comprised approximately 40% of the population of the United States: Blacks/African Americans (13.3%), American Indians (1.3%), and Hispanic Americans (17.8%). However, they account for merely 16.8% of the nation's registered nurses, less than 10% of Ddoctor of Pharmacy enrollment, and approximately 9% of the physician workforce (Carter, Powell, Derouin, & Cusatis, 2015; Tejada, Parmar, Lang, & Ghogomu, 2015; Nivet & Castillo-Page, 2017). In other words, African American, Hispanic American, and American Indian professionals collectively represented less than 20% of professionals in the health sciences fields (Valentine, Wynn, & McLean, 2016). While these numbers highlight the disparity in representation between the population of historically marginalized communities in the United States and the population of health care providers from (and for) these communities, it has been noted that HBCUs play an integral role in preparing professionals from these communities for medical and health related service (Burrelli & Rapoport, 2008; United Negro College Fund (UNCF), 2008; Gasman and Arroyo, 2014; Gasman & Nguyen, 2016).

Mentoring, or transferring professional knowledge, skills, attitudes, and social capital from one generation or person to another, has long served as an effective vehicle for educating and preparing people for future careers (Davis, 2010). Rampton (2016) outlined several benefits of having a mentor, including that mentors serve as trusted advisors who provide information and knowledge, create necessary boundaries for protégés, and provide an unfiltered opinion of protégé ideas. He also suggested that mentors benefit protégés by sharing their experiences to improve upon and areas to avoid, to encourage progress, and to stimulate personal and professional growth. Finally, mentors sponsored protégés by connecting them with personal and professional networks, thereby offering their knowledge, skills, and achievements (Rampton, 2016).

Mentoring has been found to be particularly critical in the development of trainees, junior faculty, and early career investigators from under-represented backgrounds working in academic research, medicine, and related disciplines. Pololi and Knight (2005) found that

mentoring contributed to an individual's career development and personal growth in all fields of study and facilitated junior faculty developing personal, academic, and career management skills, as well as a collegial network. They further found that mentoring in academia helped junior faculty acclimate to their new environment by avoiding practices that lead to burnout, while providing an effective means by which departments may address institutional and departmental needs for faculty retention and success (Pololi & Knight, 2005). Malmgren, Ottino and Nunes Amaral (2010) revealed that, in terms of professional performance, both protégés and mentors benefit from the mentoring relationship, with protégés more likely to rank high in their performances ratings, receive higher salary, and promotions. Eby, Allan, Evans, Ng and DuBois (2008) investigated mentoring relationships among youth in academics and in the workplace, paying specific attention to whether the relationship between mentoring and individual outcomes were modified by the type of mentoring relationship. They found that larger amounts of validity were detected for the academic and workplace mentoring compared to youth mentoring (Eby et al, 2008). Mentoring programs improved job placement and student retention rates, engaged alumni, and provided an enriching college experience. Universities and colleges with good mentoring programs ensured that mentors were knowledgeable, effective, and had experience within diverse contexts, enabling them to offer support and assistance to meet the needs of novices (O'Brian, 2014).

Historically Black colleges and universities hold an extensive history of admitting and mentoring students from underserved and underrepresented communities (Gasman & Nguyen, 2016). HBCUs were the first minority serving institutions established in the United States, founded to provide access to quality education for Black students. While HBCUs enroll students from all ethnicities, the constant throughout their 150 year collective history has been students' desires to be taught by mentors coming from the same backgrounds, experiencing the same challenges, and holding success in their fields of study. Undergraduate and graduate students have benefited from HBCUs and mentorship relationships available there by engaging in opportunities and developing meaningful relationships with colleagues (2016).

Existing best practices

Chickering and Reisser (1993) suggested seven vectors of student identity development that encourages practitioners to incorporate co- and extra-curricular initiatives with curricular learning to educate the whole student (as cited in Patton, Renn, Guido, & Quaye, 2016). Practices that promote access and affordability, academic achievement, as well as social and professional development were found to encourage persistence and graduation from undergraduate institutions (Gasman & Arroyo, 2014). Mentoring has proven central to these practices. Faculty, professional staff, and administrators at HBCUs across the nation have mentored students towards a more critical understanding of their curricular and social experiences, guided career plan development using those experiences, and successful introduction to their chosen professions (Griffin, 2012; Turner, Fries-Britt, & Snider, 2015).

HBCUs have been leaders in developing and implementing best practices to prepare students from historically marginalized communities for careers in the health sciences. Three HBCUs (Howard University, Xavier University of Louisiana, and Spelman College) were among the nation's top ten undergraduate feeder institutions for African Americans applying to medical schools in the United States (Association of American Medical Colleges [AAMC], 2016). These universities combined academic, social, and financial support with intrusive advisement, professional development, preparation for standardized professional school entrance exams, internships, and varied mentoring initiatives.

Howard University has been home to a combined bachelor's and medical degree program. As such, undergraduate students in the pre-medical program, identified as medical students, were mentored by medical school faculty and students on a consistent basis. Early identification with the professional community built student confidence and a sense of belonging (Howard University, 2017). Faculty and medical school student mentors provide targeted individual and group reviews as well as tutoring, where they encourage and supervise students' academic skills and co-curricular enrichment activities (undergraduate research, shadowing, and internship experiences, among others). Of Howard's 126 Black participants, 111 applied to medical school (88%). Howard's medical school applicants represent 2.1% of all Black applicants to US medical schools (AAMC, 2016).

Likewise, Xavier University of Louisiana utilizes formal faculty mentoring and informal peer mentoring to promote student success and secure standing as the nation's third highest supplier of Black medical school applicants (AAMC, 2016). Xavier faculty collaborated on a uniform set of freshman chemistry and biology courses and developed an early alert system to inform advisors and faculty of students who might benefit from additional support in their core prerequisite courses. Xavier faculty provided supplemental instruction for students in course work and in Medical College Admission Test (MCAT) preparation. Additional contact through supportive instruction external to the traditional classroom served as the foundation to formal mentoring relationships. Further, faculty collaborated with professional advisors and coordinators to provide intrusive advising and step-by-step guidance in the development of a medical school application portfolio (including personal statements and faculty recommendations, mock interviews, and a final review of medical school application materials). In addition, a supportive student environment has been fostered through collaboration within a cohort model that includes peer mentors, thereby facilitating peer-topeer learning and encouraging students to share responsibility in everyone's success (Hannah-Jones, 2015). Xavier's commitment to mentoring recently produced 84 Black medical school applicants out of 91 students. Xavier achieved a 92% rate of medical school application from that year's cohort representing 1.6% of all Black applicants to US medical schools.

Spelman College, a women's college, was the nation's fourth largest supplier of African American applicants to US medical schools in 2016, with 76 total Black applicants and 1.5% of all Black applicants to US medical schools (AAMC, 2016). Spelman mentors coordinated and promoted introduction to the medical field through visits to healthcare facilities and professional schools; professional and paraprofessional training; and a health shadowing program (Spelman College, 2017). Spelman has also been intentional about coordinating recruitment fairs, campus visits, and lectures from medical school recruitment personnel. Mentors exposed students to academic enrichment activities including undergraduate research and professional school application workshops. Additionally, Spelman integrated the intrusive advising and supplemental academic instruction necessary to support students in establishing goals and preparing students to be competitive in medical school application process (Spelman College, 2017).

This literature review suggests that the following are among the best practices employed by HBCUs to prepare students for medical school admission: a purposeful, goal-directed, close-knit academic community; intrusive advising; intensive test preparation; intentional preparation for the medical school application process; and mentoring. The mentoring component is especially crucial for the following reasons:

- 1. It guides students in their preparation for the academic discipline and professional training;
- 2. It inculcates students in a community of scholars and practitioners;
- 3. It celebrates students' accomplishments.

The following section discusses strategies employed by the featured initiative, the North Carolina Central University's (NCCU) North Carolina Health Careers Access Program (NC-HCAP), to prepare under-represented minority students to be competitive applicants for graduate and professional programs in the health professions.

Significance of the Study

In recent years, getting into medical school has become more competitive. An application surplus exists in medical school admission, with not enough colleges or universities to keep up with the demand (Med School Admissions is Getting Too Competitive, 2015). Over the years, the first author has had students with 4.00 GPAs score in the top percentile on the MCAT, apply to sixteen or more medical schools, and not get an interview. This proves particularly concerning and significant given America's physician shortage of doctors of color (underrepresented racial minorities). Given the desperate need for increasing high quality health care in communities of color and unique medical and cultural characteristics that inform their degree of well-being, the need of more culturally sensitive doctors and health care providers of racial minority backgrounds is critical. This paper explores the program history and outcomes of one initiative seeking to address the nation's need for more Black doctors and health care professionals: The North Carolina Health Careers Access Program.

Background of the Study

Dr. Cecil G. Sheps, a former physician at the University of North Carolina Chapel Hill in Chapel Hill, North Carolina (NC), reviewed the state of North Carolina in 1971 and realized the state had physicians, but a shortage of physicians of color. This shortage was mainly in the rural and inner-city areas. Dr. Sheps knew that there had to be a solution. As he brainstormed and discussed this situation with several colleagues, he developed an idea of how to address the shortage. Sheps targeted minority and disadvantaged students to pursue health professions as career options. He wanted students to be prepared academically to be competitive applicants when applying to medical school and other health related graduate and professional programs. This was the origin of the North Carolina Health Careers Access Program (NC-HCAP), formally the North Carolina Manpower Development Program (Beecham-Green, 2011). The program has been in existence for more than 40 years on the campuses of the University of North Carolina at Chapel Hill in Chapel Hill, Elizabeth City State University, University of North Carolina at Pembroke, and North Carolina Central University in Durham.

The Director of the Health Careers Center manages the North Carolina Health Careers Access Program in the NCCU Health Careers Center. The goal of the NC-HCAP is to increase the number of under-represented and disadvantaged minority students pursuing careers in health professions. Furthermore, it seeks to prepare students to be academically competitive applicants when applying to medical and other health related graduate and professional programs. In preparing students, NC-HCAP offers:

- a. mentoring;
- b. academic and health career counseling;

- c. health science seminars;
- d. informational sessions/workshops;
- e. graduate program seminars;
- f. professional tests prep courses;
- g. test-taking tips;
- h. shadowing opportunities;
- i. tours/site visits to health facilities/medical schools;
- j. special presentations;
- k. conferences;
- 1. study abroad;
- m. international experiences;
- n. internships;
- o. job placement;
- p. other health related educational resources and materials.

Once students enroll, advisors in University College send a list of students interested in careers in the health professions to the Health Careers Center. An e-mail is prepared and sent to students providing information about NC-HCAP.

In 1988, the director of NC-HCAP on NCCU's campus wanted students to have clinical experiences in an area of their health profession's interest. She contacted numerous healthcare facilities but found it difficult to locate agencies that were willing to accept undergraduate students for clinical shadowing experiences. Determined not to give up, the director contacted the Director of Duke University Hospital and Human Resources (DUH&HR). She explained her situation and what she wanted her students to experience. During this conversation, she also mentioned establishing a partnership with DUH&HR to provide clinical summer internship opportunities for NCCU students. Students interested in medicine and other health related areas would be eligible to apply for the internship based on certain criteria. Research confirms that it is necessary for students interested in health professions to understand firsthand the day-to-day life of physicians and other health care professionals. Clinical shadowing experiences are one of the most important components in preparing students for careers in the health profession (Johnson, 2011). The NC-HCAP director felt that adding this resource would increase students' probability of being more competitive applicants when applying to graduate/professional programs. Johnson (2011) holds that to be a competitive medical school applicant a student must shadow a doctor at least once. He also recommended shadowing more than one doctor if possible to give the student different perspectives (Johnson, 2011).

A partnership was developed between NCCU and DUH&HR. The DUH&HR director was successful in contacting eight willing preceptors (teachers or instructors) willing to participate in the program and supervise the NCCU undergraduate interns. As a result, in 1988 the Clinical Work-Study Summer Health Program (CWSSHP) - now the Clinical Health Summer Program (CHSP) - began, and continues today (Thorpe, 1989). Thus, the academic resources, mentoring and the Clinical Health Summer Program comprises the North Carolina Health Careers Access Program.

Students interested in a career in the health professions complete a profile on their first visit to the center, providing contact information, major, and career aspirations. Names are included on the program listsery. Staff inform students of opportunities of their interest when the center receives them. E-mails pertaining to health professions, recruiting events, internships, jobs/fellowships, lectures, seminars, scholarships, and other health related opportunities are e-

mailed to students on the list (Thompson-Rogers, 2016). The director provides academic and career counseling to all students interested in medicine and other health related careers. Students interested in a career in the health professions are given a checklist for preparing for medical school/health careers. The list is separated by classifications, beginning with what criteria are required by students during the freshmen, sophomore, junior, and senior year to stay on track when preparing for medical school or other health related professions. All race and ethnic groups are enrolled in the program.

The director of the NC-HCAP, who is also the University Pre-Health advisor, works with students preparing for graduate level health professional programs in medicine, dentistry, physical therapy, occupational therapy, optometry, physician assistant, and other health-related careers. The role of the University Pre-Health Advisor is to guide students on their paths to medical school and other health related programs. Most universities that have a pre-health advisor also have an advisory committee that works closely with the Center and students. Committee members craft letters for student applicants and send it to the pre-health advisor. The letters are combined with the pre-health advisor's letter to formalize the committee letter. A committee letter from the pre-health advisor provides an all-inclusive description of the applicant's professional development and preparation. The letter also includes the student's perspectives and experiences. Medical School Admission Committees sometimes prefer and/or require a committee letter. The committee letter gives the admission committee an overall evaluation of the student from a group of professionals that know him or her. The letter provides a detailed and precise assessment of the candidate. The committee letter carries an official endorsement from the college or university. This letter is only provided to students with specific criteria (Nimonkar, 2017).

Mentoring components of the North Carolina Health Careers Access Program

The North Carolina Health Careers Access Program has several mentoring components: formal staff-to-student mentoring relationships, peer-to-peer mentoring relationships, formal professional mentoring relationships through the Clinical Health Summer Program, and informal mentoring relationships. The formal staff - to - student mentoring relationship is a function of the University College. Staff in the University College train the mentors. Mentoring programs can be formal or informal. Formal mentoring programs have specific goals and purposes, while informal mentoring is unstructured without goals and are based on personal needs as they develop (Ross-Sheriff, Edwards, & Orme, 2017). Students who mentor other students receive community service hours for their participation. NCCU requires all students to complete 125 community service hours, which is mandatory before graduation. Mentors associated with NC-HCAP are trained by staff in the Health Careers Center. The following describes the mentoring programs in detail.

Formal staff-to-student mentoring relationships

As students enroll at NCCU, advising for freshmen begins in University College the first two years of matriculation. University College is an academic success and enrichment department that works with students to cultivate and enhance academic performance as they transition through the first two years of their academic programs. Student engagement sessions, test-taking skills, stress management, time management, how-to-study, tutoring, and supplemental instruction are offered during this phase. Formal staff-to-student relationships normally begin during the first advising visit or once students receive a permanent advisor. The students meet with this same advisor for two years, unless the advisor discontinues employment, transfers to another position, or the student changes majors. University College advisors schedule appointments to meet with students during the semester. These advisors keep a close

relationship with their advisees/ protégées to make sure the students retain good grade point averages (GPA) are attending classes, and are making use of resources if additional assistance is required, such as tutoring. For students receiving an early warning grade (grade below a C), the advisor contacts the student and discusses a plan to bring up the grade before the end of the semester. Other alternatives might be to advise the student to drop the course if the advisor feels the load should be reduced or the student feels it would be in his/her best interest to drop. Once students complete the years in University College they transition to the department of their major where they are provided an advisor within the department. Departmental advising will be provided to students until graduation, unless the student changes majors.

Peer-to-peer mentoring relationships

The Health Careers Center implements peer-to-peer mentoring relationships. The purpose of this program is to provide guidance and positive influences to first-year students. The program began in August 2015 and was implemented by the NC-HCAP director. Students are asked if they would like a peer mentor once they register with the Center. Peer mentors are juniors with the Center who have registered to be a mentor and are assigned to first time freshmen or transfer students. Normally the match is with two students in the same or similar disciplines. During freshman matriculation, the junior mentor supports and encourages the freshman protégée in his/her academic and personal growth. As relationships continue, the mentor becomes a friend as well as a role model to the protégée. Mentors assist with study skills, improving social skills, and setting career goals. The mentor also takes on other roles when mentoring. For instance, listening to the protégée's problems and making recommendations when needed. One of the most important objectives of the mentor is assisting the protégée with acclimating to college life (Malmgren, Ottino, & Nunes Amaral, 2010). Mentors are asked to meet with the protégée twice a week for two hours or more. Since its inception the program has had 53 mentors and 45 protégée participate. Mentors and protégée provide assistance to the Health Care Center during special projects. Students receive community service hours for assisting the Center.

For peer-to-peer mentoring, the mentor or protégée has the option to continue the program during the sophomore year and keep the same mentor, who will be a senior. The relationship follows the same process for that academic year. The mentor/protégée can withdraw from the program at any time without consequences. Sometimes, protégées would like to change mentors. This request is permitted. Some of the protégées who have been mentored register to be mentors when they become juniors and provide the same support that they received from their mentors. This continuous cycle supports incoming NC-HCAP freshmen through their first two years of enrollment at North Carolina Central University and prepares the protégée to support incoming NC-HCAP freshmen during their last two years of enrollment as a mentor (Thompson-Rogers, 2016).

Professional mentoring relationships

Professional mentoring relationships exist between the director of NC-HCAP and the students with profiles registered with the Health Careers Center. The director mentors students by assisting them with making positive choices academically, taking ownership of their responsibilities, cultivating life skills, developing core values, appreciating diversity/good peer relationships, and assisting in graduate college preparations, all of which reflects the purpose and mission of the North Carolina Health Careers Access Program.

The director normally mentors 175 to 215 students each academic year. Students have a close relationship with the director. The consistent increase in the number of students applying to participate in NCCU's NC-HCAP indicates this program's success. With specific reference to

the mentoring component of the program, participants mention the following academic and personal development milestones as benefits of the program via evaluations: increased self-confidence; more objective and intentional views of their future; increased positive attitudes; development of practical skills; increased employability; enhanced academic and study skills; improved grade point averages and academic achievement; improved chances of application to medical and professional study; and focus on their career aspirations. Professional development mentoring components, such as career building workshops, seminars, and lecture attendance, reportedly improved participants' comprehension, interviewing skills, communication skills, critical thinking, problem solving, and soft skills (Thorpe, 1988).

The Clinical Health Summer Program

Another component of NC-HCAP mentoring lies within the Clinical Health Summer Program. The Clinical Health Summer Program (CHSP) comprises a seven-week experiential learning opportunity provided to eight eligible students. Eligibility is based on students enrolled in a health science or health related degree seeking program at NCCU. Applicants must have a 2.5 minimum grade point average, and have completed biology, chemistry, and math with at least eight credit hours. Finally, students must be members of a racial group that is under-represented in the health professions (i.e., African American, Native Americans, Hispanic/Latinos, and Pacific Islanders) or from educationally or economically disadvantaged backgrounds. Student interns work at Duke University Hospital/Duke University Health Systems or at a private practice in the Raleigh-Durham area for six weeks under the supervision of a licensed healthcare professional in medicine, dentistry, optometry, podiatry, public health, nursing, health administration, allied health, or veterinary medicine (as a preceptor). CHSP students are exposed to various medical procedures based on their field of interest (i.e., neurology, physical therapy, pediatrics, cardiology, oncology, dermatology, urology, and endocrinology). The seventh week consists of professional development activities including work on resumes, personal statements, presentation skills, soft skills, and interview skills. During this final week, they also attend field trips and scheduled science, technology, engineering, and mathematics (STEM) and science, technology, engineering, arts, and mathematics (STEAM) seminars. The program culminates with a ceremony where interns provide presentations on a topic of interest to them during their internship.

The CHSP assures that interns acquire experience, knowledge, skills, professional judgement, and remain interested in pursuing careers in the health profession (Thompson-Rogers, 2016). Indicators of success for this component of the program include the eagerness of interns, preceptors, and Duke University Medical System's interest in expanding the program. For instance, the Duke University Medical System requested that the internship be extended beyond six weeks and that the numbers of interns be increased. In addition, many interns have been invited to continue the internship, volunteer, apply for employment, and/or offered other opportunities (Thompson-Rogers, 2014). During site visits at placement agencies, preceptors and their co-workers have complimented the effectiveness of the program and the professionalism of the interns (Thorpe, 1988). Preceptors further support the program and its interns by writing recommendation letters for graduate and professional programs and providing ongoing mentoring. The annual report for academic year 1989-1990 noted that seven of the students participating in the Clinical Health Summer Program planned to continue their education and pursue a degree in the health profession. One student graduated and gained employment with Duke University Medical Center (Thorpe, 1988).

Informal mentoring relationships

The third mentoring phase is the relationship between students and faculty, staff, alumni, and student organizations. Some students who enroll at NCCU have a pre-existing relationship with a mentor. These mentors could be faculty, staff, alumni (K-12 teachers), sorority members, church members, boys and girls club staff, staff working with summer NCCU STEM and STEAM programs, or programs in neighboring communities. Students may request that the Center match them with a mentor or students may seek their own mentors (Thompson-Rogers, 2014). The staff employed by the NC-HCAP work with students by providing resources to assist in achieving success in their academic programs.

Medical and health related graduate and professional matriculation

Annual reports offer a historical view of activities associated with the Health Careers Center and the NC-HCAP. The 1989–1990 Annual Report notes the acceptance of six students into medical programs, one into a dental program, and one into a pharmacy program for the 1989–1990 academic year. Thorpe (1988) indicates that this was an increase from previous years. Further indication of NCCU's NC-HCAP success is the occurrence of past participants who return to NCCU to assume tenured positions in the College of Arts and Sciences, where the North Carolina Health Career Access Program takes place (Thompson-Rogers, 2014).

Methods

Evaluation results from program reports serve as data for the study's content analysis of documents from 1989 to 2016. The population comprised undergraduate program participants. In addition, journal notes from the current director of the featured program contributed to understanding the history and effectiveness of the initiative. The concept of mentorship served as the conceptual framework used to view and interpret the data, as well as to form recommendations. The constant comparative method of data analysis was employed. Triangulation of data took place in terms of the use of both program reports and reflective journaling. In addition, the use of reports from multiple years offers triangulation in terms of time, thereby strengthening the study.

Results

Since its 1989–1990 annual report, the NC-HCAP program continues to show progress. For instance, over the last five years, the student retention rate [shown in Table 1] rose from 69.2% in 2009 to 80.6% in 2015. The rate has not met the projected goal, but continued to increase 2009 - 2015, yet dropped to 77.7% in 2016.

Table 1: Retention rates	, 2009-2016 ((freshman to sophomo	re year)
--------------------------	---------------	----------------------	----------

Cohort	Rate	Goal
2009	69.2%	70%
2010	67.7%	78%
2011	71.5%	79%
2012	73.2%	80%
2013	73%	80%
2014	79.8%	82%
2015	80.6%	82%
2016	77.7%	82%

Data collected by the College of Arts and Sciences further reveal that 34 students were admitted to graduate and professional programs and 247 students completed internships. The following academic year, 2013–2014, 40 students were admitted to graduate and professional programs and 221 participated in internships. In the 2014–2015 academic year, 45 students were admitted into graduate and professional programs, while 103 were involved in internship opportunities. In 2015–2016, 42 students were admitted to graduate and professional programs, with 99 students completing internships. Finally, during the academic year 2016–2017, 22 students were admitted to graduate and professional programs and 118 students interned (Wilson & Nwosu, 2017). Mentoring contributed to this success as noted in personal communications to the current program director.

Discussion

While the data suggest benefits to program participation, they also note areas of improvement in terms of the mentoring component of the featured initiative. While some sources advocate mentoring relationships held between protégés and mentors who share ethnicity and cultural experiences (Davis, 2010), the presumption is often that position and professional experiences are sufficient preparation for practicing professionals to support and guide novices. Yet formal mentors must be trained and engaged in practices that make mentoring relationships successful, and in fact mutually beneficial.

In addition, institutions should recruit Black faculty in STEM fields, which may encourage confidence and, ultimately success of Black students via validation from experiencing instruction and guidance from a faculty member possessing the same race. Historically Black colleges and universities hold strong records in producing STEM undergraduates who pursue graduate and professional degrees. This record has resulted in HBCUs being included among the top twenty institutions awarding science and engineering bachelor's degrees to Blacks from 2006 to 2010.

Conclusion

While the target program discussed in this work realized success via increased numbers of Black students entering medical and health training programs/ careers, work in the area must continue. The under-representation of members of marginalized groups of color in all health

professions continues to exist today (AAMCNEWS, 2017). Though significant progress has been made through the contributions of the NC-HCAP, students are still faced with multiple challenges presenting barriers to successful navigation of the medical career trajectory. For instance, some students struggled with attaining MCAT and Graduate Record Exam scores which make them eligible to enter medicine and other health-related graduate and/or professional programs. This reflects the dearth of rigorous science and math curricula in a significant number of traditional K-12 schools in the U.S. and a lack of resources and training for K-12 STEM educators serving minority populations.

The lack of representation of native speaking, under-represented ethnic groups among STEM faculty in higher education presented another challenge for program participants of this study. For instance, during program evaluations, students mentioned difficulty in understanding the accented English of some foreign born faculty members as a barrier to learning (Thompson-Rogers, 2014). However, these language barriers might be remedied via multifaceted modes of sharing information from the mentor. Overall, mentoring at HBCUs is essential to insure students' successful navigation of their academic journeys, professional development, and eventual careers in medicine and allied health professions. Recommendations for practice center upon further cultivating program mentoring relationships between students, faculty, and staff at HBCUs.

References

- Allen, W. R. (1992). The color of success: African-American college student outcomes at predominantly White and historically Black public colleges and universities. *Harvard Educational Review*, *62*(1), 26–45. https://doi.org/10.17763/haer.62.1.wv5627665007v701
- Allen, W. R., & Jewell, J. O. (2002). A backward glance forward: Past, present and future perspectives on historically Black colleges and universities. *Review of Higher Education*, 25(3), 241–261. https://doi.org/10.1353/rhe.2002.0007
- Association of American Medical Colleges. (2016). Undergraduate institutions supplying 15 or more Black or African-American applicants to U.S. medical schools, 2016-2017. *Applicants and Matriculants Data*. Retrieved from https://www.aamc.org/data/facts/applicantmatriculant/86042/factstablea2.html
- Association of American Medical Colleges. (2017). Promoting a diverse and culturally competent health care workforce. *AAMCNEWS*. Retrieved from https://news.aamc.org/for-the-media/article/diverse-healthcare-workforce/
- Burrelli, J., & Rapoport, A. (2008). Role of HBCUs as baccalaureate-origin institutions of Black S&E Doctorate Recipients. *InfoBrief Science Resources Statistics (NSF 08-319)*. Retrieved from http://files.eric.ed.gov/fulltext/ED502482.pdf
- Cantey, N. I., Bland, R., Mack, L. R., & Davis, D. J. (2011). Historically Black colleges and universities: Sustaining a culture of excellence in the twenty-first century. *Journal of African American Studies*, 17(2), 142–153. https://doi.org/10.1007/s12111-011-9191-0
- Carter, B. M., Powell, D. L., Derouin, A. L., & Cusatis, J. (2015). Beginning with the end in mind: Cultivating minority nurse leaders. *Journal of Professional Nursing*, *31*(2), 95–103. https://doi.org/10.1016/j.profnurs.2014.07.004
- Davis, D. J. (2010). The academic influence of mentoring upon African American undergraduate aspirants to the professoriate. *The Urban Review: Issues and Ideas in Public Education*, 42(2), 143–158. https://doi.org/10.1007/s11256-009-0122-5
- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72(2), 254–267. https://doi.org/10.1016/j.jvb.2007.04.005
- Gasman, M., & Arroyo, A. T. (2014). An HBCU-based educational approach for Black college student success: Toward a framework with implications for all institutions. *American Journal of Education*, 121(1), 57–85. https://doi.org/10.1086/678112
- Gasman, M., Nguyen, T., & Conrad, C. F. (2015). Lives intertwined: A primer on the history and emergence of minority serving institutions. *Journal of Diversity in Higher Education*, 8(2), 120–138. https://doi.org/10.1037/a0038386
- Gasman, M., & Nguyen, T-H. (2016). *Historically Black colleges and universities as leaders in stem*. Philadelphia, PA: Penn Center for Minority Serving Institutions.
- Griffin, K. A. (2012). Learning to mentor: A mixed methods study of the nature and influence of black professors' socialization into their roles as mentors. *Journal of the Professoriate*, 6(2), 27–58.

- Hannah-Jones, N. (2015, September 13). A prescription for more Black doctors. *The New York Times*. Retrieved from https://www.nytimes.com/2015/09/13/magazine/a-prescription-for-more-black-doctors.html
- Howard University. (2017). *Pipeline Programs*. Retrieved from http://dev.medicine.howard.edu/about-us/student-affairs/pipeline-programs
- Kendricks, K. D., Nedunuri, K. V., & Arment, A. R. (2013). Minority student perceptions of the impact of mentoring to enhance academic performance in STEM disciplines. *Journal of STEM Education*, 14(2), 38–46.
- Malmgren, R. D., Ottino, J. M., & Nunes Amaral, L. A. (2010). The role of mentorship in protégé performance. *Nature, International Weekly Journal of Science* 465, 622–626. https://doi.org/10.1038/nature09040
- Med School Admissions is Getting Too Competitive. (2015, August 25). Retrieved from https://forums.studentdoctor.net/threads/med-school-admissions-is-getting-too-competitive.1153390/
- Morrill, J. S. (1858). Speech of Hon. Justin S. Morrill of Vermont, On the bill granting lands for agricultural colleges. Congressional Globe Office: Washington, DC.
- National Center for Education Statistics, Institute of Education Sciences. (1996). Historically Black Colleges and University, 1976-1994. U.S. Department of Education, Washington, DC.
- National Center for Education Statistics, Institute of Education Sciences. (2016). Digest of Education Statistics, 1990 2015. U.S. Department of Education, Washington, DC.
- Nivet, M. A., Castillo-Page, L. (2017) *Diversity in the physician workforce: Facts and figures* 2014. Washington, DC: Association of American Medical Colleges.
- O'Brian, S. (2014). Why university mentoring? Four benefits of a university mentoring program. *Chronus Blog*. Retrieved from http://chronus.com/blog/university-mentoring-four-benefits-university-mentoring-program
- Patton, L. D, Renn, K. A., Guido, F. M., & Quaye, S. J. (2016). *Student development in college: Theory, research, and practice* (3rd ed.). San Francisco, CA: Jossey-Bass & Pfeiffer.
- Pololi, L., & Knight, S. (2005). Mentoring faculty in academic medicine. *Journal of General Medicine*, 20(9), 866–870. https://doi.org/10.1111/j.1525-1497.2005.05007.x
- Rampton, J. (2016). Ten reasons why a mentor is a must. *Inc.* Retrieved from https://www.inc.com/john-rampton/10-reasons-why-a-mentor-is-a-must.html
- Ross-Sheriff, F., Berry Edwards, J., & Orme, J. (2017). Relational mentoring of doctoral social work students at historically black colleges and universities. *Journal of Teaching in Social Work*, 37(1), 55–70. https://doi.org/10.1080/08841233.2016.1270250
- Spelman College. (2017). Health Careers Program. Retrieved from http://www.spelman.edu/academics/special-academic-programs-and-offerings/health-careers
- Tejada, F. R., Parmar, J. R., Lang, L. A., & Ghogomu, J. (2015). A comparison of pharmacy technician experience, degree and major as predictors of academic performance between two racial groups at a historically black university. *Currents in Pharmacy Teaching and Learning*, 8, 112–118. https://doi.org/10.1016/j.cptl.2015.09.018

- The University of North Carolina at Chapel Hill. (2006). *Health Careers Access Program celebrates 35th anniversary* [Press release]. Retrieved from http://www.unc.edu/news/archives/nov06/nchcap111406.htm
- Thompson-Rogers, G. K. (2014). 2014 2015 Annual report of North Carolina Health Careers Access Program: Clinical Health Summer Program. Durham, NC: Author.
- Thompson-Rogers, G. K. (2016). North Carolina Health Careers Access Program: Clinical Health Summer Program (CHSP) Guidelines. Durham, NC: Author.
- Thorpe, L. (1991). North Carolina Central University: Clinical Work-Study Summer Health Program 1990-1991 Annual Report. Durham, NC: Author.
- Thorpe, L. (1989). North Carolina Central University: Clinical Work-Study Summer Health Program 1988-1989 Annual Report. Durham, NC: Thorpe.
- Turner, C. S., Fries-Britt, S., & Snider, J. (2015). Mentoring outside the line: The importance of authenticity, transparency, and vulnerability in effective mentoring relationships. *New Directions for Higher Education 2015*(171), 3–11. https://doi.org/10.1002/he.20137
- U. S. Census Bureau. (2017). *American community survey*. Retrieved from https://www.census.gov/quickfacts/
- U.S. Department of Education. (n.d.). *United States Department of Education lists of postsecondary institutions enrolling populations with significant percentages of undergraduate minority students*. Retrieved from https://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html
- Valentine, P., Wynn, J., & McLean, D. (2016). Improving diversity in the health professions. *North Carolina Medical Journal*, 77(2), 137–140. https://doi.org/10.18043/ncm.77.2.137
- Wilson, C., & Nwosu, V. (2017). *College of Arts and Sciences*. Five-Year Data Summary Durham, NC.
- Wilson, C., & Thompson-Rogers, G. K. (2017). 4.1 Student achievement, Federal Requirement, Durham, NC.

Corresponding author: Dannielle Joy Davis

Contact email: djdavis@slu.edu

Examining the Effects of Reflective Journals on Students' Growth Mindset: A Case Study of Tertiary Level EFL Students in the United Arab Emirates

Hinda Hussein Higher Colleges of Technology, United Arab Emirates

Abstract

The purpose of the study reported in this paper was to examine the effects of reflective journals on students' learning, how they foster students' growth mindset, and the students' own perceptions of the journaling process. To this end, 15 students enrolled in an introduction to nutrition course participated in writing reflective journals about their eating habits with respect to the course content. This research used a qualitative instrumental case study design and the required data were collected from students' journals and focus group interviews. A content analysis approach was employed to examine the journals and this indicated that reflective writing improves learners' conceptual understanding of the course, promotes growth mindset, and helps shed light on the students' inner thoughts. The finding of this study revealed that reflective journal writing has a significant impact on EFL learners' understanding of concepts and on fostering growth mindset.

Keywords: reflective journals, growth mindset, critical thinking skills, EFL learners

Introduction

The current higher education environment in the United Arab Emirates (UAE), aligned with its business community, is moving towards preparing its students for the 21st century market (HCT, 2017). This entails focusing on building not just content and language, but developing higher order thinking skills and growth mindset. The impact of reflective journals on learners in higher education has been praised, studied (Korstange, 2016) and found useful. Reflective journals have also been found to enhance the learning process as this practice bridges the gap between what the learners are doing and what they should be doing (Cathro, O'Kane, & Gilbertson, 2017). It also develops students' awareness of their own skills (Boud, Keogh, & Walker, 1998). Studies have shown that learning while reflecting on the metacognitive process is an important way of learning, however, it is not spontaneously learned and it must be taught (Wallin & Adawi, 2017). Giving learners the opportunities to reflect on their learning is a substantial way to focus learners and give them tools for improvement. Chau and Cheng (2012) state that in the current literature of second language learning (L2), there is a significant effect on the development of learning in reflective writing. The importance of being cognitively aware through reflection in higher education has been extensively covered in the literature. Nevertheless, reflection journals may not increase students' grades in content, but it enhances their conceptualization of meaning and thinking skills (Murphy & Ermeling, 2016).

There is rather limited research on how EFL learners reflect on their learning when involved in their academic content and their awareness of growth mindset. This is particularly true with students in the United Arab Emirates who are studying their content in English as a medium of instruction. A practice of writing reflective journal by students, for this nutrition course, was undertaken and a questionnaire was designed and conducted by the researcher to gather information on students' perceptions of the journal writing. This study will observe how these reflective journals reveal students' awareness of concept learning, mindset and move towards growth mindset. The purpose of this research is to examine the effect of reflective journals on students' learning, how it fosters students' growth mindset and their perceptions of the journal writing. This research aims to answer the following questions:

- 1. Can reflective journals reveal students' conceptual development?
- 2. Do reflective journals foster growth mindset?
- 3. What are students' perceptions of their own growth mindset?

The drive for the current study was encouraged by the growing population of UAE citizens studying a four year degree in an English medium. In this level of education, EFL learners need to improve their linguistic competency and their critical thinking skills. Research indicates that language is more effectively learnt when the target language is in authentic use and content-based language instructions (CBLI) are used (Richards & Rodgers, 2001). The term content-based language instruction refers to an approach that integrates content and language learning. Hence, use of a reflective journal is aimed at building learners' content knowledge and their thinking skills at the same time. This is in line with the current educational environment in the UAE, which is geared towards preparing students for the 21st century market with the focus on building not just content and language, but also developing critical thinking skills and growth mindset. Furthermore, there is a need for future research in examining EFL learners' reflective journal writing in the content classroom (Goris, Denessen, & Verhoeven, 2017).

Literature Review

Reflective journals

Researchers view reflective journals as an instrumental tool for alerting and guiding students towards improving their learning. Dewey (1933) was one of the first to write about reflection in education. He stated that reflective thinking is "the active, persistent, and careful consideration of belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it ends" (p. 9). In 1987, Schon further explained the concept of reflection as a conversation between thought and action. Reflective journals are used in many courses as written logs of students' thoughts about specific concepts and their learning process (Thorpe, 2004). Other researchers stressed the importance of reflective journals focusing on the process of learning in enhancing students' performance rather than the product (Park, 2003). Boud, Keogh, and Walker (1998) further explain the significant impact of the reflection on the actual process of the learning at a deeper level.

Other authors such as Sumsion & Fleet (1996) state that reflective processes allow the learners to be "looking back on experiences, decisions and actions; recognizing values and beliefs underlying these actions and decisions; considering the consequences and implications of beliefs and actions; exploring possible alternatives; and reconsidering former views" (Sumsion & Fleet, 1996, p. 121). With reflection, people are usually engaged in a period of thinking within which they examine complex experiences or situations. Moreover, it is suggested that in addition to the reflection embedded in the practice, reflective writing provides a measure of the writer's L2 ability (Hyland, 2007). Importantly:

By engaging in reflection people are usually engaging in a period of thinking in order to examine often complex experiences or situations. The period of thinking (reflection) allows the individual to make sense of an experience, perhaps to liken the experience to other similar experiences and to place it in context. Faced with complex decisions, thinking it through (reflecting) allows the individual to separate out the various influencing factors and come to a reasoned decision or course of action. (Clarke & Graham, 1996)

Theoretical framework

Journaling is utilized as an exercise for reflection and a tool for teaching, learning, and research within education and in academic fields (Fabriz, Ewijk, Poarch, & Buttner, 2014). This study uses Gibbs' Reflective Cycle or Reflective Model (1988), which is a theoretical model for reflection often taken as a framework for reflective writing in coursework assignments that require reflection stressed within the learning process of the course. The model has six stages, usually displayed as follows:

- 1. Description
- 2. Feelings
- 3. Evaluation
- 4. Analysis
- 5. Conclusion
- 6. Action Plan.

This study has taken Gibbs' Reflective Cycle (adapted by Bulman and Shultz, 2013) as its frame because of its clear and elaborated stage settings which can give learners an opportunity to reflect on their experience, and to understand what they did well and what they could do

better in the future. Gibbs' model stems from an earlier theoretical model formulated by Kolb (1984) as an experiential learning model, depicting learning through experience. Kolb's model constitutes a four-stage experiential learning cycle (Kolb, 1984). Referred to, sometimes, as an iterative model, the version of Gibbs' Reflective Cycle given to students may be slightly adapted.

Growth mindset

According to psychologist Dweck's (2006) research, there are two mindsets: a fixed mindset and a growth mindset. Students with a fixed mindset believe that abilities are innate and cannot be enhanced. On the other hand, growth mindset learners believe that effort can bring a positive change and that challenges are ways to improvement if one focuses on the effort and process not just product. Figure 1 outlines the two mindsets.

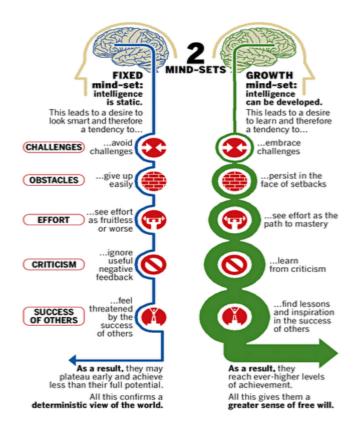


Figure 1: Two Mindsets Chart (Dweck (2006). *Mindset: The new psychology of success*, p. 245. New York: Random House.)

This research study supports that these two mindsets are not permanent in that learners can be guided to move from a fixed mindset to growth mindset. This change of the mindset requires a learning effort and does not happen accidently. Dweck (2015) acknowledges that everyone has a combination of both mindsets, but cautions that there is a need to be aware of when the fixed mindset appears in the behavior.

Other researchers who embraced reflection with growth mindset and applied it in the classroom associate reflection and metacognition to development (Davis, 2016). This research reports that reflective thinking is one of the ways of moving these mindsets from fixed to growth mindset. Boyd (2014) characterizes Dweck's work on growth mindset as "a transformative and

irrevocable way of thinking about something . . ." (p. 29), and a source of qualitatively new outlooks of learning and for course design.

Related work

Current research reports the significance of writing reflective journals (Wallin & Adawi, 2017). However, Wallin and Adawi point out that, in higher education, most of reflective writing research comes from teacher education and nursing. Supported by the work of these researchers and other examples of reflective journal writing, this study aims to fill part of the gap by examining the impact of students' journal writing thoughts on the value of journaling. The theoretical underpinning of this paper, therefore, is broadly based on concepts contained in Gibbs' 1988 reflective model and practice. It also draws from Dweck's growth mindset and the insights that have emerged out of the data gathered for this study.

Methodology

This research paper is based on an empirical research designed as an instrumental case study. This approach gives the study a potential output to provide insight and understanding into the phenomenon of students' reflective journals and the impact these reflective writings have on learning. Stake (1995) justifies the case study approach as it gives the researcher an opportunity to notice the natural life. Encouraged by such testimony, this research's qualitative approach is designed to understand more about the students' learning process through reflective journalling. Because the case study method simulates a representation of an actual situation, Merriam (1998) confirms its usefulness: "Anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon" (p. 41). This qualitative case study research applied two methods of data collection: documents (reflective journals) and focus group interviews. A variety of information sources is used to ensure the use of triangulation, which enhances the validity of the study. This approach is in alliance with those promoting the use of multiple methods, including observation, interview and document review, in a qualitative case study research (Stake, 1995).

This type of design in methodology is appropriate because it is flexible in its nature and suitable for the unpredictability of the findings (Stake, 1995). In qualitative research, the focus is on what meaning and understanding participants attribute to their experiences. Stake notes "a case study cannot be defined through its research methods, but rather in terms of its theoretical orientation and interest in individual cases" (Stake, 2000, p. 435). The questions for the reflective journals were modeled with a growth mindset in design, and were about describing, evaluating and analyzing the situation.

Participants and study design

This research used convenient participant samples – the researcher's students. The participants were 15 female students who were Emirati nationals and between the ages of 19 and 23. They were studying in a bachelor program in a public tertiary institution in the United Arab Emirates (UAE). This institution has more than 23,000 students and offers various English-taught programs in Applied Communication, Business, Computer and Information Science, Engineering Technology and Science, Health Sciences, and Education. All programs are designed in consultation with business and industry leaders to ensure that students' skills are job-relevant and to the highest standards. This course, requiring the reflective journals, is a 16 week nutrition course for the bachelor degree. Most of the students are in their second year of college, which is the time they are required to take this general elective course in their program structure. In this English medium program, enrolled students (whose native language is Arabic)

are required to pass English proficiency tests such as the International English Test (IELTS) and/or theTest of English as a Foreign Language (TOEFL) to be admitted to the bachelor programs. Students had also taken three academic English courses in their first year to improve their English competency. As part of the course assessment students write a reflective journal of a minimum length of 200 words concerning their eating habits and in relation to the content of the course. Participants submitted the reflective journal by week 8 of the 16-week semester. Before they started writing, participants responded 'yes' to the question of whether or not they were familiar with journal writing as it was introduced during their foundation English courses. Nevertheless, the researcher gave a brief orientation and explained about the process of reflective journals. Journals from 15 (one class) participating students were analyzed. The themes that emerged from the reflective journals were examined to better understand students' growth mindset in relation to their understanding of the course content and their personal experiences of the reflective process.

The participants wrote a reflective journal in week eight of a sixteen-week semester (see Appendix A). The questions for these reflective journals were modeled with a growth mindset in design. Participants were familiar with journal writing in English courses, but have not done it in a content class. An induction of topic preparation was needed and conducted before the start of the writing. Later, a focus group interview was carried out to understand if the reflective journals helped students comprehend the concepts better, enhanced their growth mindset, and to draw out student perceptions (see Appendix B). A group of five students voluntarily participated in the focus group.

Data collection

This study used two ways of gathering the qualitative data: reflective journals and a focus group interview. In addition to being data collection methods, reflective journals and focus groups also serve as a strategy for research when trying to find how a perspective of a problem is formed (Mertens, 2009).

Reflective journals

The main source of data was the reflective journals (see appendix A). There were practical reasons for using journal writing in this study. It was imperative that students in the nutrition class, who were engaged in learning about food and health, reflect on what they are learning and how it is related to them on a personal level. Furthermore, studies suggest that journal writing encourages students to reflect (Fabriz, Ewijk, Poarch, & Buttner, 2014) and to learn content, and that "reflective diaries can focus on learning content or behavior" (Wallin & Adawi, 2017, p. 2). The data from the journals was anonymised for ethical considerations. The journals were identified by number (S1, S2, S3,...). The researcher, who is also the instructor of the course, described the research to students and got their verbal agreement, but no signed consent forms were collected.

Focus group interview

The second set of data for this study came out of a focus group interview (see Appendix B) which took place a couple of weeks after completing the journal writing. The two weeks gave time for students to process their learning, and to take a concept based quiz planned within the coursework. The researcher chose the focus group interview to evoke students' perspective and have them actively engage in an exchange of information (Mertens, 2009). The focus group interview would provide an opportunity that allows students to express their views and reflect on their learning. Other methods, such as a questionnaire, could not offer that kind of information exchange. One objective of the focus group interview was also to determine

whether participants went on with writing reflectively beyond the class assignment and study exercise. Another objective was to ascertain whether there was perceived merit in reflective writing using the Gibbs reflective cycle. Prior to organizing the focus group, the researcher of this study informally discussed in an open conversation with students about their experience with reflective journals. Five questions guided the follow-up focus group interview (see Appendix B). The interview was conducted with a group of five students. The interview session was recorded using audio recorder and was later transcribed. The researcher took notes with the aim of capturing any evidence of paralinguistic clues such as nods of agreement or disagreement, which added additional dimension to the transcript.

Reflective journal coding

The coding process of this study was guided by an inductive approach based on Gibbs' model of reflective learning. Gibbs' six-stage model would later be used to frame the thematic coding. This qualitative content analysis, using an inductive approach thoroughly discussed in the literature (Merriam, 1998), has followed Gibbs' model of reflective learning (Figure 2). The researcher further used Creswell's suggestions of thinking about the data and its general meaning and recording ideas and thoughts (Creswell, 2007). Data was analyzed concurrently with data collection (Miles, Huberman, & Saldana, 2014). At the first stage, a number was assigned to each student to protect students' identities and initial open codes were allocated to each recurrent word or phrase with a particular idea. Then, the researcher used axial coding and grouped the ideas into the following topical categories: description, emotions, evaluation, and action. After completing this stage, the researcher further examined the data using selective coding and began to merge the recognized categories into three distinct themes by considering the meaning of each theme and how it is connected to the process of reflection. This resulted in an augmentation (Kember, Wong, & Leung, 1999) of the data which helped in organizing each theme and reflection. This helps the researcher in organizing the data. (Glesne, 2011).



Figure 2: Reflective Learning Model (Bulman and Schultz (2013). *Reflective Practice in Nursing*, p. 232. Wiley-Blackwell)

After the data were carefully analyzed, three major themes emerged from the categorization of topics:

- 1. Specific learning experience,
- 2. Connection to the experience
- 3. Changes due to the process.

The first theme entails a discussion of the participants' understanding of their specific learning experience. This is followed by a look at their personal connection to the experience as the second theme. Finally, the third theme marks the changes that occurred due to this process. The various models of reflective learning from Kolb's (1984) experiential learning, to Gibbs (1988) reflective model, to the adaptation of Gibbs' model by Bulman and Shultz (2013) support these three themes as key aspects of the reflection process that should be experienced by students (Korstange, 2016).

Data Analysis and Results

The themes that arise from the data of this research clearly respond to the research questions presented at the beginning of the study.

Research question 1: Is there an impact of reflective journals on conceptual development? In theme one, which constituted remarks on specific learning experience, it is evident in the data as shown in the excerpts below that, through reflection, many participants demonstrated making sense of learning the content as the concepts and theories became embedded in

their writing about their eating habits. The excerpts exhibit students' responses with accurate and specific knowledge of the content of the units studied.

- S1: Because of my food diary was focused in simple carbs, but I will concentrate to an intake of more complex carbohydrate by adding on my meals more vegetables and there is a wide variety of them I did not include in my diet such as Broccoli and asparagus which gives me a fiber.
- S2: I would like to be away from simple sugars and starches that will help my body to be healthier
- S6: By Return to daily food it's clear to see that my food need more of both carbohydrate that's mean simple carbohydrate and complex carbohydrates. If we eat large amounts of carbohydrates, it will negatively affect our health, for example gaining excess weight. If it falls short of the limit, the body needs energy to work so there will be no energy will indicate the body is idle.
- S5: So I will replace fast food by eating vegetables every day, because it is the vegetables are a nutrient-rich, low-calorie, high-quality carb. Eating vegetables helps me meet your vitamin A, vitamin C, potassium and folate needs.

But then we have three student responses below which are indicative of a learner who has general knowledge, but not concrete information.

- S3: I should add more vegetables, cause it contain a huge amount of vitamins like vitamin B-6, vitamin A and vitamin C to my lunch and dinner, beside I should take not less than 100 mg of mineral a day like fruits, vegetables, milk, meat, legumes, whole grains to balance my diet.
- S15: it's better to not take supplement because the high proportion of vitamin caused problem in the body
- S11: Improving your intake of carbohydrates and fiber means you will need to start selecting wholesome, non-processed foods. These foods are not refined and they are found in their natural form.

It is at this stage that students receive feedback to guide them back to the units. One common theme in students' responses was that the units that dealt with starches, vitamins and minerals were not well understood by students and thus required more explanations by the teacher. To this end, there is a display of a clear impact of reflective journals on the students' conceptual development.

Research Question 2: Do reflective journals foster growth mindset?

The second theme that is evident in the data is the notion of connecting to the experience. Prior to fostering the growth mindset, Dweck informs researchers that it is important to comprehend students' mindset (Dweck, 2006). In the context of this study, participants candidly described their eating habits and factors that affected those habits. Nevertheless, a close examination of participants' responses indicates that a number of them came with a fixed mindset about their eating habits, as illustrated in the following excerpts:

S4: I have many bad eating habits. For example, I usually stay awake at night, I am a night person which makes me hungry so I like to eat chips and order fast food to satisfy my hunger.

S7: I like sugar a lot, all my family like it and my mother bakes all the time. We have a lot traditional sweets in our house. I eat it when I go to my grandmother house.

S9: I don't know. I tried before to eat healthy, but it never works. I always quit. I tried many diet, but fail.

S3: Every Friday we go to grandmother's house. I love her food, it is rich. We eat a lot.

S4: If one day I went out with my friends to the fast food restaurants, in each restaurant their healthy options I can select from these healthy meals. if there is not I can order a grilled burger with lettuces instead of white bread. I can also add extra vegetables on my meals, or I can order a salad instead of sandwiches that would contain complex carbs. I can ask for brown bread or grain whole one instead of white bread or white pasta.

S4: Of course it is very difficult to change my eating habits, but if I want to do that I must try to change these habits more than once and without giving up. The first thing I should do when I feel hungry I make a salad made up of vegetables that I love and try not to order from fast food restaurants. At lunch eat salad with a little rice because the rice also important to my body.

S6: There are many people trying to change their eating habits to become healthier and without disease. I want to change my eating habits, for example reducing the fast food because it is make me fatter and Increases the incidence of diseases. So I will replace fast food by eating vegetables.

This kind of reflection must precede the development of growth mindset because it transforms the experience into genuine learning about the individual values and goals and about larger social issues. Students' writing repeatedly exhibited discontent with their eating habits, which created an opportunity for a shift of these habits to a positive direction. In this nutritionally personal context, it is encouraging for students to write so freely and connect to their personal experiences. This practice allows the learners to relate facts and connect with them. This is a step in the right direction of analyzing the information and moving towards mind shift (Boyd, 2014). The researcher sees a shift towards growth mindset in the making as the participants discussed steps they could and will do in the future. This study shows that reflective journals can successfully serve as a mechanism to foster growth mindset.

Research Question 3: What are students' perceptions of their own growth mindset?

The students' feelings and perceptions of their own reflective journals were explored from the focus group interview responses. Four out of the five who voluntarily participated in the focus group interview discussed their views about their growth mindset. Respondents strongly recognized the importance of writing reflective journals towards understanding their potential for growth as illustrated in the excerpts below. However, one student found journaling and writing, in general, an unpleasant experience because of the effort required, but would have liked to discuss the journal questions in an informal open discussion instead. The findings showed that most participants realized the benefits of reflective writing as the following excerpts of student writings illustrated.

- S2: I learned a lot. I think I can change
- *S6: I believe I can improve and do better*
- S9: I know now that I have think positive to change. Usually I don't think I can, but now I think I can
- S3: I will make changes slowly day by day

Discussion

The current research established the efficacy of journal writing for EFL nutrition students. The purpose of this research was to answer if writing reflective journals could enhance students' conceptual learning, foster their growth mindset, and to gauge their views of the process of journaling. The first research question focused on finding out students' understanding of the principle concepts of the nutrition course. This question was addressed by analyzing students' reflective journals using a qualitative content analysis approach (Merriam, 1998). The results suggest that journal writing positively improved students' learning of the concepts as can be seen from excerpts of students' writing. It clearly indicated those who understood the concepts and gave an opportunity for the others to review the concept.

The second question was posed to investigate if learners' reflective journals about their eating habits could foster growth mindset. To answer this question, students answered a questionnaire (see Appendix A), which showed that a number of the learners had a fixed mindset in regard to their eating habits. This was exhibited through their writing. This understanding is crucial at this point as students gain deeper understanding of their thoughts, which ultimately paves the way for moving from fixed to growth mindset (Boyd 2014).

As discussed earlier, in order to answer the second question, five students were invited to participate in a focus group interview to gather their views on writing journals (see Appendix). They all agreed that the use of reflective writing was informative as one of the students summarized. Previous studies varied in how they approached the role of reflective journal writing. Some studies focused on allowing students to reflect on new knowledge learned in class, reinforce their learning experience by recording their thought process as they progress further in the course (Wallin & Adawi, 2017). Other studies have used it for language development (Richards & Rodgers, 2001). It can also teach them to formulate new opinions and perspectives, and gives them a risk free venue to explore, think, and practice skills learned in class. The present study explored self-evaluation, intellectual growth and self-awareness resulting from the process of reflective journaling. The current study provides evidence that reflective journals improve learners' conceptual knowledge, promote growth mindset, and enhance understanding their thoughts through writing. Reflective journal writing holds a significant advantage for EFL learners studying content.

Conclusion and Implications

This study examined the effort of reflective journal writing of learners' conceptual development, fostering of growth mindset, and understanding students' perceptions of the journaling process. Reflecting allows a deeper comprehension of the specific experience, concepts learned and offered some new insight to this phenomenon. This paper described the route taken by learners through the process of learning and understanding about their own thoughts, their current mindset and the road towards growth mindset. The findings from the qualitative data analysis clearly show that the use of journaling could positively enhance student's learning process. A number of themes were visible in the documents and the focus interview that could develop learner's critical thinking skills and meta-cognitive skills. These results have important implications for the EFL student in a content classroom as it contributes to the development learners' skills in understanding concepts and their growth mindset. Similarly, it could have significance to teachers' development as they design, deliver lessons and develop materials.

After interpreting the results, two limitations were faced. One of the limitations of this study is that the sample size was small, therefore, future similar research should be done on a larger sample. Another limitation is the fact that there was only female representation and it would be interesting to investigate how male learners would use reflection writing.

References

- Boud, D., Keogh, R., & Walker, D. (Eds.). (1998). Reflection: *Turning experience into learning*. London: Routledge.
- Boyd, D. E. (2014). The growth mindset approach: A threshold concept in course redesign. Journal on Centers for Teaching & Learning, 6, 29–44.
- Bulman, C. & Schultz, S. (2013). Reflective Practice in Nursing. Wiley-Blackwell.
- Cathro, V., O'Kane, P., & Gilbertson, D. (2017). Assessing reflection: Understanding skill development through reflective learning journals. *Education & Training*, *59*(4), 427–442. https://doi.org/10.1108/ET-01-2017-0008
- Chau, J., & Cheng, G. (2012). Developing Chinese students' reflective second language. Journal of Language Teaching and Learning, 2(1), 15–32.
- Clarke, D. J., & Graham, M. (1996). Reflective practice: the use of reflective diaries by experienced registered nurses. *Nursing Review*, 15(1), 26–29.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Davis, V. W. (2016). Error reflection: Embracing growth mindset in the general music classroom. *General Music Today*, *30*(2), 11–17. https://doi.org/10.1177/1048371316667160
- Dewey, J. (1933). How we think. Amherst, NY: Prometheus (Original work published 1910).
- Dweck, C. S. (2006). Mindset: the new psychology of success. New York: Random House.
- Fabriz, S., Ewijk, C. D., Poarch, G., & Buttner, G. (2014). Fostering self-monitoring of university students by means of a standardized learning journal a longitudinal study with process analyses. *European Journal of Psychology of Education*, 29(2), 239–255. https://doi.org/10.1007/s10212-013-0196-z
- Fulwiler, T. (1986). Seeing with journals. English Record, 32(3), 6–9.
- Gibbs, G. (1988). Learning by doing: A guide to teaching and learning methods. London: FEU.
- Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (5th ed.). Upper Saddle River, NJ: Pearson.
- Higher Colleges of Technology, (2017). *Strategic goals*. Retrieved from http://hct2.hct.ac.ae/strategic-goals/
- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16(3), 148–164. https://doi.org/10.1016/j.jslw.2007.07.005
- I. W. (2017). Higher Colleges of Technology. Retrieved from http://www.hct.ac.ae/en/about/learning-model/
- Kember, D., Wong, A., & Leung, D. Y. (1999). Reconsidering the dimensions of approaches to learning. British Journal of Educational Psychology, 69(3), 323–343. https://doi.org/10.1348/000709999157752
- Korstange, R. (2016). Developing growth mindset through reflective writing. *Journal of Student Success and Retention*, 3(1).

- Merriam, S. B. (1998). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Mertens, D. M. (2009). Research methods in education and psychology: Integrating Diversity with quantitative and qualitative approaches. Thousand Oaks, CA: Sage Publications.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Murphy, D. L., & Ermeling, B. A. (2016). Feedback on reflection: comparing rating-scale and forced-choice formats for measuring and facilitating teacher team reflective practice. *Reflective Practice International and Multidisciplinary Perspectives, 17*(3), 317–333. https://doi.org/10.1080/14623943.2016.1164681
- Park, C. (2003). Engaging students in the learning process: The learning journal. *Journal of Geography in Higher Education*, 27(2), 183–199. https://doi.org/10.1080/03098260305675
- Richards, L., & Rodgers, T. (2001). *Approaches and methods in language teaching*. New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511667305
- Schon, D. A. (1987). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage Publications.
- Stake, R. E. (2000). *Case studies*. Thousand Oaks, CA: Sage Publications.
- Sumsion, J., & Fleet, A. (1996). Reflection: Can we assess it? Should we assess it? Assessment & Evaluation in Higher Education, 21(2), 121–130.
- Thorpe, K. (2004). Reflection learning journals: from concept to practice. *Reflective Practice International and Multidisciplinary Perspectives*, *5*(3), 327–343. https://doi.org/10.1080/1462394042000270655
- Wallin, P., & Adawi, T. (2017). The reflective diary as a method for the formative assessment of self-regulated learning. *European Journal of Engineering Education*, 43(4), 507–521. https://doi.org/10.1080/03043797.2017.1290585
- Yin, R. K. (1993). Applications of case study research. Thousand Oaks, CA: Sage Publications.

Corresponding Author: Hinda Hussein

Email: hhussein1@hct.ac.ae

Appendix A

Journal Questions:

- 1. What do you think your general eating habits are like?
- 2. What things affect the way you eat?
- 3. What do you think about the quality of your carbohydrates intake?
- 4. What would you change in your eating habits?
- 5. How would you make these changes? What could you include? Think practically.
- 6. If you eat out, how could you make sure you have a better intake of food?
- 7. Do you think your current diet gives you enough vitamins and minerals? Why, why not?
- 8. How could you get more quality vitamins and minerals into your diet?
- 9. What do you think is the long term effect of not having enough vitamins and minerals?

Appendix B

Focus Group Interview Questions:

Prior to the focus group: 5 students voluntarily participated. Researcher explained to them to answer honestly and that there are no right or wrong answers, just what they think:

	Mindset Questions
1.	Did answering questions in the journal help you understand the concept? How? If no, Why?
2.	Have the journal questions make you think or change your health habits?
3.	How did the journal reflection writing help you think differently?
4.	How did you feel about writing the journal?
5.	Would you do similar journal in your other classes? Why?

Appendix C

Open codes	Axial Codes	Categories	Themes	
White bread, brown bread, whole grains, soda, milk, laban, yogurt, candy bars,	simple &complex carbohydrates, fiber, vitamins, minerals; Dairy product;			
Time, sleep, wake up late, get up late class time, homework, tests, busy, Family, friends, school meals, canteen, snack machines, coffee machine, unhealthy snacks, junk food traditional meals, grandmother cooking/visits the way I eat; I can't watch TV or online series without eating snacks.	Not having enough time to eat breakfast or cook. Busy with homework and assignments. Grab anything I can find. Unhealthy food in the college.	Description of current situation	Specific Learning Experience	
Feel bad, depressed, bad mood, stressed, guilty, my eating is bad; feel guilty after eat lot of snacks; feel very bad; feel bored, nothing to do;	Eating unhealthy foods and feeling bad about it. Bad moods negatively affects choice of food.	Emotions Neutral Positive Negative	Connection to Experience	
Peer pressure, weight gain, skin problems, clothes don't fit', no energy, tired all the time, focus problems in class, tried diets before it never works. My mood can really affect.	Family & friends pressure of food. Having eight gain; Lack of energy; Inability in focusing on studies;	Evaluation	Connection to Experience	
Change, I should, I can I will, I can replace, try to cook healthy food, fix my habit, for my skin.		Action	Changes to the Process	

School Administrators' Competencies for Effective English Language Teaching and Learning in Thai Government Primary Schools

Singhanat Nomnian Mahidol University, Thailand

Thithimadee Arphattananon Mahidol University, Thailand

Abstract

This study aims to explore school administrators' insights into the key competencies that play an important role in achieving success in English language teaching and learning at government primary schools in Thailand. The study employed semi-structured interviews with six school administrators, including four principals and two head teachers of foreign language departments from Bangkok and five regions in Thailand. Based on SEAMEO INNOTECH's (2015) Success Competencies of Southeast Asian School Heads, the results reveal that school administrators' essential competencies include strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement. These competencies are overlapped, interconnected, and underpinned by complex factors including school administrators' visions and administrative policies, English as a medium of instruction, Thai teachers, foreign teachers, teacher professional development, students' learning behaviors, learning materials and ICT, English language development activities, family engagement, and the strong support of the Ministry of Education. These factors are not mutually exclusive; they are, rather, interwoven in the sophisticated educational networks that require consistent and mutual collaborations from all relevant stakeholders who will gear the students towards English language learning success. School administrators' competencies and leadership skills should be enhanced for effective administration. Professional learning community partnerships need to be initiated and strengthened for long-term collaborations in order to enhance sustainable development of English language teaching and learning in primary education in Thailand.

Keywords: competencies, English language teaching and learning, government, primary schools, school administrators

Introduction

English, one of the designated foreign languages core curriculum documents, is a compulsory and foundation subject for all Thai students at government primary schools in Thailand. Primary education students' acquisition of English as a foreign language (EFL) can provide a crucial stepping stone for their English proficiency development and intellectual growth. From Nomnian's (2013) review of the 2008 Core National Curriculum with regard to English language education policies, there are a number of changes and challenges both internal and external that require development in the school curriculum, language education policies and teaching approaches in order to meet national and international standards for the success of Thai primary school students.

It is undeniable that primary education provides a strong foundation for English acquisition in order to promote higher English proficiency and instill positive attitudes towards English for primary school students. Thai primary school students' English language proficiency and performance is assessed against the standardized Ordinary National Educational Test (O-NET) under the supervision of the National Institute of Educational Testing Service (NIETS), which can demonstrate school accountability, promote school competition, monitor students' learning outcomes, assess education quality levels, and meet with related educational standards criteria (UNESCO, 2014). However, O-NET English results have revealed primary school students' low English proficiency for nearly the past decade (see Figure 1).

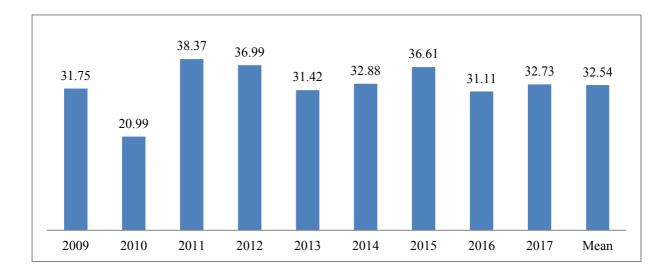


Figure 1: Average Scores of O-NET English for Primary Education (Grade 6) 2009-2017 (Data Source: National Institute of Educational Testing Service)

Figure 1 chronologically illustrates fluctuations in primary school students' annual average scores in English which have not exceeded the national expected minimum of 50 points out of 100. These scores are indicative of the undesirable outcomes and unmet goals of English language teaching and learning at primary school education in Thailand. Prapphal (2008) argues that educational quality and standards at various stages in the teaching and assessment process can be achieved by enabling teachers, learners, administrators and stakeholders, or end users to recognize the purposes, nature, benefits and drawbacks of each testing and assessment method when evaluating English language learning outcomes.

There are challenges encountered by Thai teachers who have low language proficiency and no prior training in the learner-centered and communicative language teaching approaches, underpinned by certain impeding factors such as teacher, learner, institutional, internal and external factors (Tongpoon-Patanasorn, 2011). Nomnian's study (2012), for instance, claims that Thai primary school English teachers who have not majored in English prefer "standard" or "native-like" English pronunciation to teach students. In addition, these teachers experience challenges in teaching primary school students whose language learning behaviors, inhibitions, age, parental dependence, ethnicity, and linguistic differences hinder the students' English proficiency development (Nomnian, 2012).

Kaur, Young, and Kirkpatrick (2016) suggest the following five strategies to improve English language teaching in Thailand: learning English informally through print media, the Internet, radio and television; engaging teachers in educational planning at a national level; establishing a network for local English teachers to organize seminars, presentations and training sessions for other teachers to gain English knowledge and skills; expanding bilingual schools by recruiting qualified foreign teachers; and increasing teachers' salaries based on their English skills and teaching abilities. It is also important to be aware of English as a lingua franca (ELF), which is the official working language of ASEAN. English teachers should employ more realistic and practical teaching approaches among Thai primary school students who will communicate with other non-native speakers within the Southeast Asian region.

Although pedagogical implications have been suggested to enhance English language teaching and learning at primary school education, Thailand's language education policies have been relatively inconsistent due to political instability. Under the current government led by Prime Minister General Prayut Chan-o-cha, there have been a number of initiatives such as boot camps and digital English resources and innovations to boost English skills and proficiency for all education levels in Thailand. Part of the impetus is because English is agreed by the Association of Southeast Asian Nations (ASEAN) member nations to be a working language within Southeast Asia, and the Thai government is highly aware that to gain international presence and be competitive within the region, English language education needs to be introduced from primary school levels.

Baker and Jaruntawatchai (2017), however, argue against the over-emphasis of English language education policies underpinned by native-speaker ideology and Anglo-centric models of English. In early 2016, the government used its special administrative powers to the centralized educational system by promoting a more top-down management model that was claimed to ease policy implementation in spite of the red tape, bureaucratic, traditional, and hierarchical structure (Oxford Business Group, 2016). Located in EFL academic settings, educational institutions in Thailand should promote English-medium instruction and mediated teaching materials (Forman, 2016). The Education Minister, Teerakiat Jareonsettasin, has set a new standard for English teaching and learning based on the Common European Framework of Reference for Languages (CEFR). CEFR is an international standard for assessing teachers' and learners' English language abilities by striving for all Grade 6 (Prathom Suksa 6) graduates to achieve the A2 level (pre-intermediate level) with frequently used expressions, and to be able to express themselves in English in everyday situations within five years (Fredrickson, 2016). Despite the fact that a large amount of the budget has been allocated for English language teaching reforms, initiatives and innovations by the Ministry of Education (MoE), students' English proficiency is under-achieved (Kaur, Young, & Kirkpatrick, 2016).

English language education policies, such as Thailand 4.0 proposed by the current government, have been implemented nationwide at public primary schools. School administrators play an essential administrative role in educational policy implementation that can promote teaching and learning capable of driving schools in a more effective direction in order to meet the national education goals. Key competencies of school administrators', including school principals and head teachers, for effective English language teaching and learning are underexplored. Funded by the Office of Basic Education Commission (OBEC), this present study aims to draw on school administrators' perceptions of the competencies that lead to desirable English language learning and teaching. Affected by the current political uncertainties and English education reform, this study highlights key challenges and provides some practical recommendations for the government and the Ministry in terms of educational policies, planning, and administration for strengthening primary English language education in Thailand.

Literature review

The conceptual framework of this present study draws on *Success Competencies of Southeast Asian School Heads: A Learning Guide*, developed and proposed by the Southeast Asian Ministry of Education Regional Center for Educational Innovation and Technology. The framework (Figure 2) suggests five key competencies including strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement (SEAMEO INNOTECH, 2015).

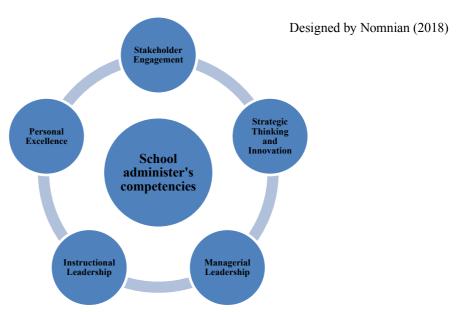


Figure 2: Five Competencies of School Administrators (Data Source: SEAMEO INNOTECH, 2015)

In terms of the competences, first primary school administrators must be equipped with strategic thinking and innovation that accommodates with the rapid change of new technological advances in English language education. Kenan Institute Asia (2017) states that Thailand 4.0 policy aims at promoting Thai primary school students developing 21st century skills in English, digital literacy, and creativity in order to be a competitive workforce for Thailand's digital economy. An education advisor at the Primary Educational Service Area Office in Nakhon Nayok province calls for school administrators and teachers to implement innovative ELT pedagogies through Project-Based Learning (PBL) (Kenan Institute Asia,

2017). It is thus essential that English teachers must be supported by school administrators with appropriate teaching materials and resources for effective teaching and learning (Forman, 2016).

Secondly, managerial leadership is essential for school administrators who need to lead academic and support staff to meet the government's vision and mission as well as the MoE's policies. Drawing upon Sakulsumpaopol (2010), school administrators must perform key roles as follows: team building, professional development, curriculum leadership, community partnership establishment, administration, creation of school vision and missions, effective communication, collegial support, task delegation, monitoring and evaluation. In this study, school administrators are crucial in administering and managing staff and resources to meet the national education goals. It is, however, important to consider situated socio-cultural and political influences that may affect school administration and performance. Establishing a strong collaboration among academic and administrative staff within the school can help sustain the school goals.

The third competency regarding instructional leadership enables school administrators to monitor and advise teachers' pedagogical development. Borg, Birello, Civera and Zanatta (2014), for example, identify pre-service primary school English teachers' beliefs about effective EFL lessons as follows: lessons should have Content and Language Integrated Learning (CLIL) content; parents should have opportunities to contribute to lessons; lessons should employ new technologies; lessons should include interactive activities such as role plays; lessons should use English as a medium of communication; the teacher's role is to guide; and, resources should include language-learning games, computers, and authentic materials. It is advisable for all primary school teachers of English to receive continuous professional development in order to keep up-to-date on relevant ELT methodologies (Borg et al., 2014; Hayes, 2014; Uysal, 2012).

Personal excellence is the fourth competency related to school administrators' recognition of professional development for themselves and staff. English language teacher education is vital to the promotion of effective ELT at primary school level. Uysal (2012), for example, states that effective educational reforms and productive change in in-service primary school teacher education programs require an ongoing professional learning process with a follow-up component by establishing collaborations among authorities or change agents, trainers, and trainees at all stages of this professional development process. Teachers should be allowed to participate in and reflect upon what they learn, such as new techniques and methods through different models; be provided practical resources and materials; and be valued, and additionally supported and monitored, in their own contexts in order to develop a sense of ownership of their change process (Uysal, 2012).

Last but not least, stakeholder engagement is essential as school administrators have to meet the needs of stakeholders including the Government, the MoE, communities, and parents. Young learners are, of course, central to all stakeholders' goals that aim to build their sound foundation. As Hall (2014) notes, the increasing demand for English language learning at an early age is underpinned by governmental obligations, parental expectations and national targets. Hall (2014) addresses four principal reasons for the growth of Primary ELT, which are due firstly to the widespread assumption that younger children are more likely to be successful language learners; secondly, to the increasing globalization-driven demand for English; thirdly, to government and policy-makers' needs of English-speaking workforce for higher economic gain; and finally, to parents' expectations of their children to benefit from learning English.

The conceptual framework of this study is related to both the Organization for Economic Cooperation and Development (OECD) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). OECD/UNESCO (2016) suggests four main aspects of Thailand's education system that are crucial for progress: curriculum, student assessment, teacher and school leader policies, and the use of information and communication technologies (ICT) in education, which will potentially promote a high-quality education system that drives socio-economic development in order to gain competitiveness in ASEAN community. These aspects focus on the revision and improvement of curriculum standards for all students, assess students across their full range of competencies being relevant for their life-long learning, develop a holistic strategy to prepare teachers and school leaders for education reform and implementation, and create effective ICT strategies to equip all schools, teachers and students for the 21st century skills and competencies (OECD/UNESCO, 2016).

Thailand's Ministry of Education is a significant agent in developing school administrators, teachers and students to meet targeted international standards through professional development and sufficient resources, including teaching materials and ICT facilities for teachers and students (Rasyidah, 2017). Vungthong, Djonov and Torr (2017), for instance, claim that, in 2011, the Thai government initiative called "One Tablet Per Child" (OTPC) was not effective because there were pedagogical drawbacks regarding teachers' roles in guiding EFL learners to use tablets as a portable device for English language learning (p. 32). It is important to note that, according to Hayes (2014), effective primary English language education should be conducted by competent English-major teachers, teachers with positive attitudes toward English, continual professional development mindset, stimulating theme-based activities promoting genuine communicative language use, and considerable extra-mural exposure to English through films and television programs in English that are subtitled rather than dubbed into learners' L1 in order to promote language competence across the education system (p. 28).

Besides the education system, socializing processes such as access to social network, family support and the positive influence of friends, directly and indirectly influence learners' personal choices and engagement in interaction for language learning, which will in turn affect students' motivation, and this can be seen not only in teacher-student relations but also in student-student relations and in the informal out-of-class interactions in which learners engage (Dadi & Jin, 2013). Creating the school and family partnership can help both parties to monitor learners' physical, mental, social and academic growth by strengthening the relationships between teachers and parents because their mutual support can effectively synergize learners' English language learning (Nomnian & Thawornpat, 2015).

Although this conceptual framework categorizes each competency, school administrators need to employ appropriate competencies when performing certain administrative tasks. Thus, these competencies are not mutually exclusive, but rather interconnected, overlapped, and context-dependent. This conceptual framework can potentially address and assess individual school administrators' competencies that are relevant for professional, institutional, local and national levels. It is a meaningful, useful, and practical framework for this study because it can pinpoint educational administrative issues for further improvement. Thai primary school administrators can therefore evaluate their performance by themselves in enhancing students' English language proficiency and promoting the sustainable development of Thailand's English language teaching at a primary education context.

Research Methodology

A qualitative study was employed as the research methodology in this study. Creswell (2009) states that qualitative research offers a way to explore and interpret the meanings of social, cultural, and political issues and problems. Therefore, to gain school administrators' perceptions on meaning making of these underlying competencies in this study, a qualitative research design can enable researchers to recognize particular competencies that surveys and statistics may not bring to life since education is a complex and interwoven system that needs a closer lens to examine it (Farnsworth & Solomon, 2013).

Six primary schools were purposively selected from exemplar schools that were representatives of each region in Thailand (i.e. Bangkok, Central, North, South, East, and Northeast). These primary schools were chosen according to a range of criteria. First, they had to be government schools under the supervision of OBEC. Secondly, students at the schools had to have gained high achievements in O-NET English tests over the past decade. Thirdly, the schools had to have been assessed according to the educational quality standards by Office for National Education Standards and Quality Assessment (ONESQA) and gained a "high distinction" level. These large-scale schools, with more than 1,000 students, were publicly well-known as they were located in downtown areas of major provincial cities in each region. Parents were keen to send their children to study at these schools as the students' academic performance, teachers' credentials and support were highly qualified and reliable. All of them also had classes such as English and Gifted programs for academically competent and talented students, which were not only financially supported by the government, but also parents associations.

Approved by the Mahidol University Ethics Committee in Social Sciences (MU-SSIRB) prior to data collection, ethical issues were regarded in this study as the school administrators were high-ranking government officials whose identities had to be kept strictly confidential prior to the data collection. The school administrators in this study preferred not to reveal themselves because some information they gave might be traced back and could have adverse effects on their positions and career paths. The researchers understood their concerns and confirmed for them that their information would be treated with the greatest degree of security. Their names would not be stated in any published reports, materials, and articles so as not to hint to government authorities or readers in any way.

Following confirmation of the ethical guidelines, the participants signed the informed consent form and allowed the researchers to interview them at their schools. Having educational administration degrees, the six school administrators, including four principals and two head teachers of foreign language departments, were highly competent with more than 20 years of administrative experience. Choosing administrative career paths, they moved from small to large-scale schools with a large number of students and staff, exceeding 1,000. Challenged by the current government and national educational policies, they had to implement and carry out the policies that meet the Ministry's objectives, goals, and standards. The role and responsibilities of school principals also included school performance, quality assurance, teacher supervision, resource and budget allocation, staff promotion, parents association, and community outreach and engagement. Head teachers were more concerned with academic and language subjects that had to meet the Ministry's expected learning outcomes.

In this study, although the school principals were more accountable than the head teachers, they worked closely together. For instance, the head teachers had to put ELT policies such as the Communicative Language Teaching (CLT) approach into teaching practice. They were all

accountable for national policies and stakeholders' expectations for the students' academic performance based on O-NET results. It is worth noting that there were two main processes comprising top-down and bottom-up. The former focuses on policy implementation and assessment while the latter emphasizes the actual practices as a response to the policies. School principals liaise between the MoE and fellow academic staff and students. Head teachers, on the other hand, were rather practical and realistic as they had to work with teaching staff and students and gain feedback to be returned to the principals. Thus, their roles and responsibilities were equally significant, leading to the effective teaching and learning of English.

Semi-structured interview was the main research tool used for data collection in this study because the researchers could gain deeper insight into their real-world experience. They influenced school administration and students' academic performance as they made final decisions and supervised overall planning and quality assessment. Interview questions were sequenced in terms of school information and background, government policies (their implementation and challenges), English language teaching and learning practices and success stories, parental and family support, government support, and further needs and recommendations. Each interview lasted for an hour, was conducted in Thai, audio recorded, then transcribed, translated, and validated by the researchers.

Braun and Clarke's (2006) thematic analysis was employed in this study as it enables social science researchers to examine people's perceptions and interpretations of their meaning such that they might reflect the "reality" of their lived experiences, in particular the social contexts in which they live. In this study, the perceptions shared by each school administrator would, to some extent, reflect on key competencies impacting on the desirable outcomes of teaching and learning at one's school.

Results

Drawing upon SEAMEO INNOTECH's (2015) Success Competencies of Southeast Asian School Heads: A Learning Guide, the results of this study reveal five competencies including strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement, which are shared by school administrators for effective ELT in primary school education in Thailand.

Strategic Thinking and Innovation

Because of the government's current policy of Thailand 4.0, school principals and head teachers are advised and encouraged to employ various kinds of technological devices and innovations to enhance students' English language learning. Schools should also be equipped with sufficient computer facilities and Internet that can not only facilitate teaching practices, but also promote ICT literacy in their students.

Extract 1

Every class is equipped with computer and Internet. Teachers are encouraged to promote students' ICT skills for seeking knowledge and information on-line.

Extract 2

Our library offers English textbooks and subscribes to search engines that are made available to students both off-line and on-line database.

Extract 3

We try to allocate an IT budget sufficient for equipment ready for mediated on-line learning and teaching materials.

Both on-line and off-line teaching and learning materials have become essential learning devices in 21st century classrooms for everyone. Schools that know how to utilize them will gain a comparative advantage over other schools in terms of teaching effectiveness and updated information that students can access anytime, anywhere (Hayes, 2014; OECD/UNESCO, 2016; Vungthong, Djonov, & Torr, 2017). Yet, schools must allocate the budget wisely for effective returns on teaching and learning.

Managerial Leadership

School principals play a significant role in envisioning the schools' direction and policy implementation. They need to lead by example and show that they sincerely care about their teaching staff in order to attain school goals and objectives in terms of promoting students' English language skills and proficiency.

Extract 4

The school principal needs to be a leader in prioritizing and recognizing the importance of English in school. Instead of telling teachers to follow English language policies, the principal has to monitor how teachers implement the policies and see whether the implementation is effective.

School principals' attitudes toward English are equally vital since they can provide an alternative lens for seeing English as a communicative tool rather than a subject. In the schools that participated in this study, principals stated firmly that English is valued as a learning tool that helps gain knowledge from other subjects such as the sciences, mathematics, and social sciences.

Extract 5

I would like see English as a tool for learning rather than a subject. English can be learned through other subjects such as maths, science, and social sciences, which I think will be more beneficial.

Besides possessing visionary leadership skills, principals need to have management skills for issues such as foreign teacher salaries in order to meet the Ministry's requirements. In particular, for schools with an English Program, principals need to hire foreign teachers to teach most of the subjects, and that increases the school fees that parents have to pay.

Extract 6

In terms of the budget for recruiting foreign teachers, school fees according to the Ministry regulations are no more than 70,000 baht a year -- that's 35,000 baht per term. However, our school only collects from parents 25,000 baht per term; that equals 50,000 baht per year as a budget from which to hire foreign teachers.

Nevertheless, continual teacher professional development is a must for all teachers who should seek professional learning communities that can offer them opportunities to keep up-to-date with current research and practices that allow them to feel empowered and meet other teachers with whom they can share and learn from one another (Borg et al., 2014; Hayes, 2014; Uysal,

2012). Teacher professional development enhances effective teaching practices and heightens teachers' English competency, which eventually promotes students' English achievement.

Extract 7

Our school is sponsored by ERIC (Education Resources Information Center) to provide professional teacher training courses to our teachers and other schools in the area to improve their English language proficiency and skills.

Extract 8

Our school values teacher professional development. We usually support our teachers and coteachers to attend English language development training every year because they can improve our students' English proficiency.

Extract 9

I think teacher training is important; yet, it is also advisable to analyze factors impacting on effective teaching and learning first, so teacher training courses will not be a waste of time, and the Ministry can tackle the issues more directly. Otherwise, our students' English proficiency will remain low.

It is undeniable that school administrators emphasize the professional development of their teachers because they strongly value the contribution of teachers who have a significant impact on students' English development. Teachers must set themselves up as examples for life-long learning for students who will then be motivated to learn English (Borg et al., 2014; Hayes, 2014; Uysal, 2012).

Instructional Leadership

Since the English Program was initiated by the MoE to meet the demands of ASEAN and globalization, it has become an alternative means by which parents can encourage their children to attend classes because English is used as a medium of instruction in most courses taught by foreign teachers. The number of teaching hours in the English Program is more than that in the Thai program, which exposes students to more English than their Thai program counterparts.

Extract 10

Besides the normal Thai program, our school has had an English Program (EP) since 2003 because English is an important subject to prepare our students for ASEAN.

Extract 11

EP students study maths, the sciences, computer science, and PE in English with foreign teachers for 18 hours a week while those in the Thai program study 3-5 hours a week for English classes.

Extract 12

EP students have high English proficiency compared with students in the Thai program because they use English with native-speaking teachers.

Foreign teachers are consequently sought after for English language teaching and learning in Thai primary schools to expose children to authentic communication within the educational landscape. Foreign teachers also provide linguistic and cultural resources to which students are not readily exposed beyond the classroom.

Extract 13

The main difference between foreign and Thai teachers is that students need to use English constantly with foreign teachers.

For school administrators, foreign teachers are roughly classified into native-speaking and non-native-speaking teachers with the former coming from countries that use English as a first language (e.g. USA and UK), and the latter coming from countries that use English as a second language (e.g. the Philippines).

Extract 14

Our native-speaking teachers are British and American. But for kindergarten, we use Filipino teachers who understand children because they have an education degree in Early Childhood.

Extract 15

Native-speaking teachers cannot teach grammar. Thus, we use Thai teachers to teach grammar. But, the sciences, maths, and health science are taught by Filipino teachers who can speak English. Filipino teachers seem to understand Thai ways of teaching and learning better than native-speaking teachers.

Although school administrators view native-speaking teachers as linguistic representatives of English, Filipino teachers are preferred since they are culturally more familiar with Thai primary education practices.

Extract 16

We have a job opening for native-speaking teachers who are required to demonstrate whether they can teach. Then, they are required to attend a teacher training to develop their teaching skills. Yet, we prefer to hire Filipino teachers since they are Asian, who are like Thai teachers, easy to work with, and never absent from school. We also use an agency to find native-speaking teachers because they are normally problematic and often leave without notice. The agency will find a replacement teacher immediately.

Currently, foreign teachers have not only become part of the academic discourse in Thai schools, but have brought linguistic and cultural diversity to their schools' socio-cultural landscape where teachers, students, and staff benefit from and seek possible opportunities to improve their English and intercultural communicative competence.

Personal Excellence

Although school administrators' personal excellence varies, their attitudes toward English can underpin the recruitment of Thai and foreign teachers. They need to determine whether or not foreign teachers are properly qualified to teach English rather than just focusing on their nationality and accent (Baker & Jaruntawatchai, 2017; Nomnian, 2012).

Sharing Thai as a first language with students, school administrators can help facilitate and overcome communicative challenges and academic misunderstandings between Thai students and foreign teachers where they occur.

Extract 17

In EP, there are two types of Thai teacher. One is a teacher assistant whose background is in English, who can co-ordinate between Thai and foreign teachers. The other one is a classroom teacher who has graduated in another field such as Thai or maths. They serve as points of

contact for students who have difficulties in any subject. There are a few teachers who do not have an English-major degree; yet, if they can show their English proficiency through our interview, they are also qualified to teach. We have an English teacher who has a degree in tourism.

Although most Thai teachers of English should have a degree in English, some English-competent teachers are recruited on the basis of sound teaching experience. Additional English training is required to enhance their English proficiency and teaching skills.

Extract 18

Most of our Thai teachers have a degree in English. However, there are also teachers without an English-major degree who are experienced in teaching English because we have about 3,000 students. Our school still lacks English-major teachers.

Extract 19

English teachers who do not have a degree in English are required to attend English training so that they will gain expertise in teaching.

These extracts show that Thai teachers of English are part of these schools' success because, without them, students may encounter difficulties dealing with academic and personal issues that foreign teachers may not be able to mitigate due to different socio-cultural backgrounds.

Stakeholder Engagement

Key stakeholders in this study include families, communities, students, and the MoE. Family support contributes significantly to the development of young language learners who are dependent on their parents' decisions as to which academic program (Thai or English) they should be enrolled in. However, well-to-do parents who would like their children to excel in English from an early age, normally opt for the English Program due to their belief that the more exposure their children have, the better and more quickly they can acquire English proficiency.

Extract 20

Parents are the most important factor in supporting students' English language learning. In particular, those parents whose children study in EP are interested in extra-curricular activities for their children because they are financially able to do so.

Extract 21

Parents can afford to pay 25,000 baht per term, which is 50,000 baht a year for their children studying in EP. Students will be provided with all the books, teaching materials, extracurricular activities, and school uniforms they need.

Extract 22

Parents would like the school to improve their child's vocabulary by reciting 10-20 words daily, with which I agree; but, these words need to be relevant for students.

Parents should, however, recognize the importance of their supporting role, which needs to be balanced and not conflict with school requirements otherwise, they may unintentionally disrupt the schooling process (Dadi & Jin, 2013; Hall, 2014; Nomnian & Thawornpat, 2015).

Schools with high O-NET scores tend to gain a positive reputation with parents who trust and contribute to all their school's needs in order to meet their child's achievement goals. Some schools are, however, able to set up tutorial classes for students' English development with help from university student volunteers. English Camp, for example, can promote positive attitudes in students toward English and language development should be encouraged because they allow students to use English in a fun and meaningful way.

Extract 23

Students normally attend English camp twice a year. They play games and take part in a walk rally. They enjoy using English without fear and gain more confidence.

Extract 24

We have a weekend tutorial class for students. There are university student volunteers to help our school.

School connections with local colleges or universities facilitate collaborations with external experts to be part of academic success because these experts not only bring with them their expertise, but also opportunities for further collaborations, which will be beneficial for students and teachers.

Extract 25

Every year, we often seek English language experts to give talks to our Thai and foreign teachers to improve their English knowledge and skills.

English language development activities not only provide a platform for English language use for teachers and students, but also create a mutual space for learning English through various collaborations that are extremely valuable and from which the participating schools can benefit (Hayes, 2014; Kaur, Young, & Kirkpatrick, 2016; Nomnian, 2013).

Being one of the key stakeholders, students must develop their active learning behaviors and classroom engagement. However, since Thai teachers focus on strict classroom management more than foreign teachers, students tend to be more confident using English in classes conducted by foreign teachers.

Extract 26

Thai students are very shy to speak. Comparing Thai and foreign teacher classes, the students are given more freedom to speak in foreign teacher classes than Thai ones that focus more on classroom management.

Extract 27

Students who learn with foreign teachers are more confident in speaking.

Besides the influence of teachers, using English media can motivate students to engage more in class since the media can stimulate positive attitudes towards learning, particularly for young Thai learners.

Extract 28

Students need to be exposed to English media like movies or cartoons so that they will have positive attitudes toward English and become more confident to communicate. Teachers should also encourage them to pronounce English with confidence.

Teachers and mediated learning and teaching materials promote students' active learning behaviors towards English. That teachers, however, need to accommodate and be more open to students' different learning styles rather than keeping students in silence simply for classroom management purposes (Forman, 2016).

Last but not least, the obvious role of the Ministry of Education has greatly impacted on all aspects of language education in schools nationwide.

Extract 29

Our school would like the Ministry to act as a central agency in seeking and recruiting qualified foreign teachers. We are ensured of having qualified teachers for an English Program.

The second issue is that the Ministry should provide support to schools by producing qualified and competent Thai teachers of English who can work together with foreign teachers. This way, students are developed by both Thai and foreign teachers.

Extract 30

There are two kinds of support I would like the Ministry to help with. First of all, we need qualified foreign teachers. Secondly, we need Thai English teachers who have graduated with an English-major degree. This kind of support will promote our students' English proficiency.

Extract 31

The most urgent issue I would like the Ministry to help with is to reconsider the salary for foreign teachers. Currently, the Ministry set the cap of 25,000 baht, which is not attractive for native-speaking teachers from England or America. We can only attract Filipino teachers with this salary.

School administrators stress the need for qualified foreign teachers to be recruited directly by the Ministry of Education, so that budgeting issues remain the responsibility of the Ministry of Finance. Otherwise, schools can only afford to recruit Filipino teachers who are prepared to work for less than native speakers.

Discussion

Based on the results, school administrators' key competencies for desirable English teaching and learning outcomes include strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement. School administrators play a significant role in creating a school vision, establishing professional community partnerships, maintaining and delivering effective communication, supporting and promoting teacher professional development, building teamwork, delegating tasks and administration, promoting curriculum development, and enhancing staff morale. English as the medium of instruction used by foreign teachers enables students to think and use English in a meaningful way because they not only need to employ the four language skills (listening, speaking, reading, and writing), but they also develop other relevant skills such as critical

thinking, ICT, intercultural communication, and interpersonal relationship (Borg et al., 2014; Forman, 2016). Recruiting qualified foreign teachers, producing competent Thai English teachers, and reconsidering foreign teacher salaries are the demands of highly effective schools for the Ministry to consider in order to facilitate the teaching and learning process and thereby promote students' English achievement (OECD/UNESCO, 2016; UNESCO, 2014).

School principals need to be equipped with competencies and capabilities for handling administrative tasks that can drive schools to meet the demands of the Ministry and stakeholders like parents. Success in English language teaching and learning is not easy; rather, it requires careful planning and implementation with the support of teaching and administrative staff (Hall, 2014; Hayes, 2014). The results also reveal the value of reciprocal support between school administrators and stakeholders such as teachers, students, families, communities and the MoE, which are vital at primary stages of students' physical growth and intellectual development for building a strong foundation and positive attitudes toward learning English for the effective outcomes in the future. These stakeholders' involvements are intertwined and embedded within socio-cultural and political networks that go towards establishing quality language teaching and learning in government primary schools in Thailand.

Acquisition of English at the primary level is an important foundation for young Thai English language learners, who need careful cultivation. To obtain effective English language teaching and learning outcomes requires collaboration between relevant parties that share similar goals in producing the best for both schools and stakeholders. To create and strengthen stakeholder partnerships, a professional learning community is necessary to provide a collaborative space among groups of stakeholders such as school administrators, teachers of English, parents, and public and private organizations to establish a strategic partnership community that can create synergies that drive all parties in a uniform direction under the leadership of school administrators. Thus, the students will be better-rounded and better equipped with 21st century skills required to meet the needs of ASEAN and globalization.

Conclusion

This study explores school administrators' essential competencies, namely strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement, which contribute to the desirable outcomes of English language teaching and learning at primary schools in Thailand. This study addresses complex education networks for promoting English language teaching and learning in government primary schools in Thailand. The results reveal the shared viewpoints and experiences of school principals and head teachers, who are considered as top-down stakeholders who are instrumental to policy implementation and practices. These underlying competencies are not mutually exclusive, but do in fact, overlap and interconnect. The practical implications of this study suggest that primary school administrators need to develop the necessary leadership skills and competencies that support the strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement that their positions require. In so doing, school administrators can perform their roles and responsibilities in enriching students' English language proficiency and life-long learning skills strengthened and sustained in the long term by the establishment of school-family-community partnerships. To this end, this qualitative study makes no claim to universality. It does, however, highlight school administrators' opinions on the complexity of the Thai primary education system and the maximum efforts required to meet the government's goal of elevating the standard of English language learning and teaching for young learners in Thailand.

Acknowledgments: This research project is funded by the Office of Basic Education Commission (OBEC), the Ministry of Education, Thailand. The authors would like to thank Assoc. Prof. Arunee Wiriyachittra for her constant support and constructive feedback throughout this project.

References

- Baker, W., & Jaruntawatchai, W. (2017). English language policy in Thailand. *European Journal of Language Policy*, 9(1), 27–44. https://doi.org/10.3828/ejlp.2017.3
- Borg, S., Birello, M., Civera, I., & Zanatta, T. (2014). *The impact of teacher education on pre*service primary English Language teachers. London: British Council.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: SAGE Publications.
- Dadi, S., & Jin, L. (2013). Social network relations in Omani students' motivation to learn English. In M. Cortazzi, & L. Jin (Eds.), *Researching cultures of learning: International perspectives on language learning and education* (pp. 285–307). Hampshire: Palgrave Macmillan.
- Farnsworth, V., & Solomon, V. (Eds.). (2013). *Reframing educational research: Resisting the 'What Works' agenda*. Oxon: Routledge.
- Forman, R. (2016). First and second language use in Asia EFL. Bristol: Multilingual Matters.
- Fredrickson, T. (2016, March 9). Govt launches app, Teachers' 'boot camp', *Bangkok Post*. Retrieved from http://www.bangkokpost.com/learning/learning-news/891472/english-in-the-news-govt-launches-app-teachers-boot-camp
- Hall, G. (2014, April 1). IATEFL This house believes that Primary ELT does more harm than good. *English Language teaching global blog*. Oxford: Oxford University Press. Retrieved from https://oupeltglobalblog.com/2014/04/01/iatefl-this-house-believes-that-primary-elt-does-more-harm-than-good/
- Hayes, D. (2014). Factors influencing success in teaching English in state primary schools. London: British Council.
- Kaur, A., Young, D., & Kirkpatrick, R. (2016). English education policy in Thailand: Why the poor results? In R. Kirkpatrick (Ed.), *English Language education policy in Asia* (pp. 345–361), Switzerland: Springer International Publishing.
- Kenan Institute Asia (2017). Reforming Thailand's education towards 4.0. *21st century education blog*. Retrieved from https://www.kenan-asia.org/reforming-Thailands-education-towards-4-0/
- Nomnian, S. (2012). Exploring Thai EFL teachers' reflections on teaching English pronunciation at a primary school level. *The Journal of ESL Teachers and Learners*, *1*, 47–54.
- Nomnian, S. (2013). Review of English language basic education core curriculum: Pedagogical implications for Thai primary level teachers of English. *Kasetsart Journal (Social Sciences)*, 34(3), 583–589.
- Nomnian, S., & Thawornpat, M. (2015). Family engagement on the promotion of Thai learners' English language learning in public secondary schools in Bangkok. *LEARN Journal: Language Education and Acquisition Research Network*, 8(2), 43–58
- OECD/UNESCO (2016). Education in Thailand: An OECD-UNESCO perspective, reviews of national policies for education. Paris: OECD Publishing.

- Oxford Business Group (2016). *The Report 2016: Thailand*. Retrieved April 15, 2018 from https://oxfordbusinessgroup.com/overview/improving-system-government-action-moving-improve-standards-and-reorganise-sector
- Prapphal, K. (2008). Issues and trends in language testing and assessment in Thailand. Language Testing, 25(1), 127–143. https://doi.org/10.1177/0265532207083748
- Rasyidah, U. (2017). Beyond ELT challenges and practices in Thailand. *Premise Journal of English Education*, 6(1), 64–76. http://dx.doi.org/10.24127/pj.v6i1.819
- Sakulsumpaopol, N. (2010). The roles of school principals in implementing change in elementary and secondary schools in Thailand. (Unpublished doctoral dissertation). Victoria University, Australia.
- SEAMEO INNOTECH (2015). Success competencies of Southeast Asian school heads: A learning guide. Quezon City, the Philippines: SEAMEO INNOTECH.
- Tongpoon-Patanasorn, A. (2011). Impact of learner-centeredness on primary school teachers: A case study in Northeast Thailand. *The Journal of AsiaTEFL*, 8(3), 1–28.
- UNESCO (2014). *Thailand Ordinary National Educational Test*. Central Data Catalog. Retrieved from http://www.uis.unesco.org/nada/en/index.php/catalogue/172
- Uysal, H.H. (2012). Evaluation of an in-service training program for primary-school language teachers in Turkey. *Australian Journal of Teacher Education*, *37*(7), 14–29. http://dx.doi.org/10.14221/ajte.2012v37n7.4
- Vungthong, S., Djonov, E., & Torr, J. (2017). Images as a resource for supporting vocabulary learning: A multimodal analysis of Thai EFL tablet Apps for primary school children. TESOL *Quarterly*, *51*(1), 32–58. https://doi.org/10.1002/tesq.274

Corresponding author: Singhanat Nomnian Contact email: snomnian@hotmail.com

Home Environment of Selected Filipino Gifted Individuals

Greg Tabios Pawilen University of the Philippines, Los Banos, the Philippines

Abstract

This study investigated the home environment of selected Filipino gifted individuals. It aims to answer two research questions: (1) what is the giftedness profile of the selected Filipino gifted?; (2) what types of home environments do Filipino gifted have? This study uses qualitative methods, specifically narrative research strategy, to provide a description of the home environment, the socio-emotional, intellectual, and physical environment that nurtures the intellectual skills, exceptional talents and leadership abilities of the gifted. The study highlighted important Filipino family values in describing this home environment. In this study, the home environment of the gifted contributed immensely to their positive development, not only in the nurturance of their giftedness, but also in the development of their socio-emotional skills and values system. This study recommends that there should be a strong link between the school and the family of the gifted, leading towards the establishment of stronger family support programs for the development and nurture of Filipino gifted students. Furthermore, schools can also develop different student support programs for gifted students to create stronger collaboration with the families of gifted students.

Keywords: home environment, giftedness, Filipino gifted

Introduction

The Philippines, through the Department of Education, is currently developing its first national gifted education curriculum standards for the country. This national curriculum will be used in both public and private schools that will offer gifted education programs. Except for the Philippine Science High School System, the Philippine High School for the Arts, and public regional Science high schools, most of the programs for the gifted offered in the Philippines are adapted from abroad, such as multiple intelligence and Headstart programs, among others. There are also special classes for music, arts, sports, and science offered in elite private schools. The K-12 Basic Education Curriculum is designed primarily for regular students but it also encourages educators and schools to develop and implement curricular programs for other students specially the learners with special education needs, including the gifted.

While it is necessary to develop a curriculum and programs for Filipino gifted learners, it is also imperative to develop a support system for the development of their personalities, socio-emotional skills, and values system. In this study, the role of the family for the development of Filipino gifted learners is examined.

The study draws inspiration from the home-family experiences of the Filipino gifted that contributed to their positive personal and social development leading towards positive behavior and motivation, and academic success. The study aims to examine the family that molded them, and the home that served as their immediate environment during their early childhood days. In this study, giftedness could be innate to all human beings; however, the development of this giftedness and of the gifted could be a product of a positive home environment and happy relationship among family members.

The concept of giftedness varies between scholars. Davis, Rimm, and Siegle (2011) noted that there is no single definition of "gifted" that is universally accepted. Some scholars refer to it as having special talents and abilities, while others think of it as a state of high intellect or genius. Reading the literature from a myriad publications and studies conducted by experts on giftedness gives a clear insight that the concept of "giftedness" is always associated to the attributes of "great people" having "great accomplishments", developing "great ideas" and producing "great works, inventions or performances". In some cases, giftedness is also associated with people having outstanding talents.

Tannenbaum (2003) proposed a definition of giftedness in children to denote their potential for becoming critically acclaimed performers or exemplary producers of ideas in spheres of activity that enhance the moral, physical, emotional, social, intellectual, or aesthetic life of humanity. For Gagne (1985), giftedness refers to domains of human abilities, talents, to domains of human accomplishments. Giftedness also involves excellence, rarity, productivity, demonstrability, and value attached to the skills/products of the individual (Sternberg & Zhang, 1995).

Given the nature of giftedness, gifted learners can move beyond the limits of their knowledge and skills. They can easily adapt to any new topics or skills to learn. Upon examining several studies, Davis, Rimm, and Siegle (2011) reported that gifted individuals are well adjusted in childhood, and reported to have had greater personal adjustments, emotional stability, self-esteem, professional success, and personal contentment.

Pfeiffer and Blei (2008) identified the Gifted Rating Scales (GRS) developed in the United States as a tool to assist in the identification of gifted students. In the GRS, there were six principles that were considered:

- 1. Intellectual ability the student's verbal and/or non-verbal mental skills, capacities, or intellectual competence.
- 2. Academic ability student's skill in dealing with factual and /or school-related material.
- 3. Creativity student's ability to think, act, and/or produce unique, original, novel, or innovative thoughts or products.
- 4. Artistic talent student's potential for, or evidence of ability in drama, music, dance, drawing, painting, sculpture, singing, playing a musical instrument, an/or acting.
- 5. Leadership ability student's ability to motivate others toward a common or shared goal.
- 6. Motivation student's drive or persistence, desire to encourage, tendency to enjoy challenging tasks, and ability to work well without encouragement or reinforcement (pp. 117–118).

Generally, most identified characteristics of gifted individuals appear to be always positive. However, some examples of negative characteristics of gifted can also be observed in various social and educational situations like strong preference to work independently, lack of motivation and underachievement in areas uninteresting to them, extremely perfectionist, non-conformity, impatient, and sometimes they are not comfortable following rules (Page, 2006; Davis, Rimm, & Siegle, 2011; Pawilen, 2014). Pawilen (2014) observed that the environment where they live, especially the family, influenced these characteristics of gifted. Furthermore, the negative attitudes of the gifted towards learning and other academic tasks are manifestations of their dissatisfaction to traditional classroom instruction. Thus, given a positive social, educational, and home environment, gifted individuals can overcome these weaknesses.

In the Philippines, there are few studies conducted on the gifted characteristics of Filipinos. Camara (1994) first identified a list of attributes of Filipino gifted that includes intelligence, attitudes, and values. Wong-Fernandez and Bustos-Orosa (2007) did a study to look into the conceptions of giftedness among Tagalog-speaking Filipinos and suggested a culture-based understanding of giftedness based on the experiences of the Tagalog people. Mingoa (2006) examined the making of Filipino scientists and identified gifted characteristics of scientifically gifted students. Similarly, Larroder and Ogawa (2015) identified scientific awareness, rational observation, experimentation, application, visualization, initiative, quantification, oblivion in learning, engrossment in learning, integrated learning, and acquiring of skills (p. 15) as characteristics of students who are gifted in the field of science based on the checklist developed by a Japanese scholar, Manabu Sumida, in 2010. Pawilen (2014) also identified general attributes of Filipino gifted individuals and classified the characteristics of Filipino gifted into three areas: (1) high intellectual ability, (2) exceptional talents, and (3) outstanding leadership skills.

This study will be an addition to the growing study and literature on gifted education in the Philippines. Understanding the home environment of the gifted will provide insights to educators and parents, and possibly influence the government to provide proper nurture and support to the gifted members of the society, especially young children.

Conceptual Framework

The characteristics of gifted students are greatly influenced by personal and social factors related to the individual's immediate environment, especially family and community values and culture. The nature of gifted students demands an environment that is supportive, empowering, creative, and democratic. Reichenberg and Landau (2009) pointed out that despite strong genetic influence on intellectual potential, evidence shows that children's development is also largely affected by their family lifestyle, values, goals, and other environmental characteristics. Amabile (1996) and Hennessy (2004) also opined that the environment of the gifted also plays a central role in the degree to which high-ability learners can become independent, innovative, imaginative thinkers. A gifted individual should be nurtured in an appropriate, compassionate environment

In this study, home environment is necessary for the holistic development of the gifted potentials and abilities of every person. Tannenbaum (1989) emphasized that society and the environment, which includes the home environment, provides the direction and pathway towards fulfillment of the giftedness of each individual. Knafo and Plomin (2006), in their study, also pointed out that the overall family environment, particularly the relationships and communication between its members, provides the foundation for children to develop both cognitive and affective components of psychosocial behavior, such as social relatedness and empathy.

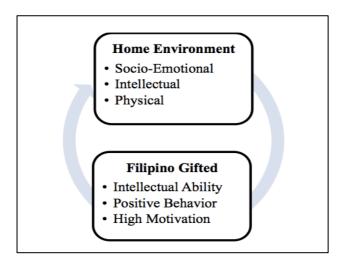


Figure 1: Conceptual Framework

Figure 1 shows the Conceptual Framework of the study. It shows that the home environment of the selected Filipino gifted had great impact and influence in the development of their gifts and in the formation of their character. The positive support from their parents contributed much to their personal, social, and intellectual development. Filipinos are generally family-oriented. They value their relationship with their family members as a source of inspiration and strength. Pawilen (2014) observed in his study that Filipino gifted draws their inspiration to succeed in their studies or in all endeavors, in order to be of help to their families. Filipino parents are also influential in the development of their children. Parents set the norms and expectations for each members of the family. For Filipinos, the home is always the center of their lives. It provides them an environment where they can experience comfort, empowerment, love, and affection. Thus the home is influential in the development of the gifted.

Methodology

This study is qualitative. It utilizes a narrative research strategy of inquiry in which the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives (Clandinin and Connelly, 2000). The narrative research strategy is used in this study to describe the home environment of selected Filipino gifted. It aims to describe the socio-emotional, intellectual, and physical home environment of the selected Filipino gifted. It seeks to understand how the home-environment contributed to the nurture of the Filipino gifted individuals. Specifically, it aims to answer the following research questions: what is the giftedness profile of the selected Filipino gifted?; what types of home environment do Filipino gifted have?

Research Participants

Purposive sampling was used to identify and select 10 Filipino gifted individuals, from ages 20—30, to participate in this study. Purposive sampling helped the researcher to select gifted participants from different disciplines and areas. Ethical considerations were also observed in the selection of the research participants. A letter was sent to the participants to confirm their willingness to be part of this study. The letter also provided assurance that the researcher will handle data and responses with utmost confidentiality and respect for privacy. The research participants were selected using the following criteria:

- 1. They belong to any of the fields of Science, Mathematics, Language, Social Sciences, and Humanities.
- 2. They possess exceptional talents and outstanding leadership skills.
- 3. They received different academic awards and recognition from their schools and from the community where they belong.
- 4. They belong to the top graduates of their schools.

Research Instrument

An interview questionnaire was developed and used to gather data about the profile of giftedness and family background of the gifted participants. The questions are not strictly structured in order to allow the researcher to make follow-up questions on important information relevant to the study. The interview questionnaire asked the gifted participants to describe their relationship with their family, parents, and siblings. It also asked the gifted to describe the socio-emotional and physical environment of their homes.

Data Gathering Procedure

This study is limited to the profile of giftedness and the home environment of 10 identified Filipino gifted. The profile of the participants will focus only in identifying the specific domains or disciplines where the participants are identified as gifted, and in identifying their special talents and abilities. The researcher had the privilege of having personal encounters with these gifted individuals.

The personal meetings provided opportunities for the researcher to interact with the gifted in a natural setting to gather important information about the home environment of the gifted. The data gathering procedure included the following:

- 1. Preparation of questionnaire for the interview
- 2. Schedule for personal or online interview with the gifted
- 3. Online and personal interviews to the gifted

4. Consolidation of result

Data Analysis

Using the narrative research strategy proposed by Clandinin and Connelly (2000), the researcher studied the lives of selected Filipino gifted individuals and asked them to provide stories about their lives through interview. The researcher reported the information into a narrative chronology that provided meanings that are relevant to the aims of the study.

The researcher used thematic analysis to analyze the result of interviews. Only the important information and statements of the gifted participants were recorded for the analysis. Some of these original responses of the gifted participants were included in this paper to provide support to the analysis. The statements were organized into different themes that will describe the home environment of the gifted. Statements that include confidential information were excluded in the study to respect the privacy of the research participants.

Results and Discussion

The results of the study were organized based on the two main research questions explored in this study.

1. What is the profile of giftedness of the selected Filipino gifted?

The first result of the study provided a profile of giftedness of the selected Filipino gifted. It identifies the specific disciplines or domains where the participants are considered gifted, including their special talents and abilities.

Participant	Discipline/Domain of	Special Talent & Abilities
	Giftedness	
Gifted 1	Political Science/Economics	Literature& Leadership
Gifted 2	Language	Leadership
Gifted 3	Natural Sciences	Leadership
Gifted 4	Music	Leadership & Language
Gifted 5	Social Science	Music & Leadership
Gifted 6	Math	Music & Language
Gifted 7	Social Science	Leadership & Sports
Gifted 8	Social Science	Music
Gifted 9	Social Science	Theater Arts & Leadership
Gifted 10	Mathematics	Language

Table 1: Gifted Profile of the Participants

Table 1 shows the giftedness profiles of the Filipino gifted participants. The result of the study confirms several studies (Sternberg & Zhang, 1995; Davis, Rimm, and Siegle 2011, Pawilen, 2014) that gifted individuals excel in one or more disciplines and they also possess exceptional talents in different areas like literature, music, art, sports, and foreign language. They also possess outstanding leadership skills. They are leaders in university organizations; some are occupying middle management positions in local government units and private companies. They belong to the top graduates of the universities where they study. The researcher observed that in spite of their outstanding performance and accomplishments, they are highly sociable and very humble people.

The gifted participants are fully aware that they are gifted in their own special way. They grew up knowing that they have special talent and they are motivated to study various topics that are interesting to them. For example, aside from his musical intelligence, Gifted 4 pursued his interest in declamation. Gifted 8 pursued his interest in music and learned to play the organ and piano by himself. Gifted 9 joined a theater arts group to pursue her interest in drama, and Gifted 10 joined a students' organization to develop his leadership and social skills. The gifted individuals are products of a happy home environment. Nurture plays an important factor in the development of their giftedness.

The result of the study shows an interesting story about the 10 Filipino gifted. First, they possess high intellectual ability, outstanding talent and skills, and leadership skills. They excel in different areas and domains from sciences, social sciences, and humanities. They also possess various talents in arts and music. These findings support earlier studies done on the characteristics of Filipino gifted conducted by Pawilen (2014), Camara (1994), and Wong-Fernandez and Bustos-Orosa (2007).

The gifted in this study are aware of their gifts that made them different from other people. They are aware of their intellectual ability and they are also happy to have special talents and interests in other areas especially in music, arts, and literature. They see the world differently compared to other people. They think differently and they express their ideas and thinking in the most creative way. They understand that giftedness is embedded in their identity as a person.

2. What types of home environment do Filipino gifted have?

This section provides a description of the home environment of the selected Filipino gifted participants in the study in terms of (a) socio-emotional environment, (2) intellectual environment, and (3) physical environment of their home.

The Socio-emotional Environment of their Home

The result of the interview and discussion with the gifted provides interesting insights that are valuable for the study to understand the home environment of the gifted. The Filipino gifted in this study live in a happy home with parents, brothers and sisters, and some with their relatives. The results from the interview were analyzed based on the several themes based on their expressions and statements. In this section, sample statements for each theme or category are reported.

A. The participants grew up in different socio-economic contexts. Not all of them came from rich or middle class families. Out of the nine Filipino gifted participants in this study, only three come from upper class families. Seven of the gifted belong to poor families.

We are largely dependent on the salary of my father who works abroad augmented by some rental payments collected from our small landholdings. We are also a Christian, United Methodist family and we value our faith as we count it to be the glue that binds us together (Gifted 1).

My family is the exact definition of a simple conventional family. My father was a fisherman while my mother used to sell seafood at the market. We were 9 in the family: my parents, my 6 siblings, and me. We belong to the average type of family in terms of finances and resources (Gifted 5).

We have a simple family but my parents provide everything we need (Gifted 7).

I came from a family of farmers. We are poor, but my parents work hard to provide our daily needs (Gifted 8).

My parents are working. We don't see each other much because we all have work and school in the morning (Gifted 9).

I grew up in a modest house. We have a simple life compared to our neighbors. My mom works hard for our family (Gifted 10).

B. The gifted grew up in religious families. This confirms the former study of Pawilen (2014) that while there are Filipino gifted who are known to be atheists, many of them are raised in deeply religious families. Six of the gifted are very active in church organizations as youth leaders. Gifted 2 and 3 are youth leaders in the church, Gifted 4 and 8 are church musicians, and Gifted 6, 7, and 9 are active in the church.

We are Christians. We value our faith as we count it to be the glue that binds us together (Gifted 1).

My family is guided by the wisdom from the Lord. We usually talk about matters in the church and our spirituality (Gifted 5).

We are a protestant family. We are all active in the church (Gifted 8).

We are very close to the Lord. We always go to church on Sundays (Gifted 9).

I go to church with my family. They are devoted Christians (Gifted 10).

C. The participants grew up with parents who are loving and supportive. All the gifted received full support from their parents who appreciated their giftedness. Their parents provided them emotional support whenever they encounter academic or personal problems. This contributed much in the development of their behavior and character. Their parents served as their first mentors. It can also be observed that, although the gifted have had very good relationship with their fathers, all of them are closer to their mothers.

A spirit of openness permeates my relationship with my parents. However, I am closer to my mother. (Gifted 1)

I have a loving, supportive, and caring family (Gifted 2).

My family is very supportive of my gifts, and they affirmed those early on, and found opportunities and avenues for me to continuously hone my God-given abilities. However, they do not push me too much, as some parents do who have a "advance to be recognized" attitude (Gifted 4).

I treat my family as a gift from the Lord. They have always been my source of comfort and wise decisions. I always find joy whenever we have conversations over dinner and simple family bonding like going to church (Gifted (5).

I believe my family nurtured my gifted potential and abilities by showing me support to achieve my dreams in spite of numerous predicaments that hinder the path to this dream. Moreover, allowing and supporting me to join and compete in several school competitions have greatly helped me to develop my potentials and abilities (Gifted 6).

My parents are very supportive. They put no pressure on us but see to it that they live by example all the values and skills they want to impart to us. I can say that I'm closer to my mom, "mama's boy." My father's traits balance the perfectionism brought by my mother (Gifted 7).

In spite of their limited resources, my father and mother make sure that our basic needs are provided (Gifted 8).

D. The gifted have positive relationships with their parents especially with their mother. This helped them develop their self-esteem. The gifted shared about their positive relationship with their parents as a key to their success. The emotional bond between them and their parents developed in them a positive outlook about life. The open communication between them and their parents allowed them to become independent and create their own identity. They are not pressured to follow either the footsteps of their mother or father.

I treasure my relationship with my parents. I am very close to both my mother and father. I can easily share them my struggles and problems. I always seek and follow their advice before making decisions (Gifted 3).

I am more open to my mom rather than to my dad. We spend a lot of time together. Most of the time, I defer to their opinions, views, and decisions, especially on important matters (Gifted 4).

I feel that whenever I need their assistance, they, especially my mother, always show their everlasting support. Moral values imparted by my parents have also guided me to not stray from what is right and just, to always dream for something extraordinary, and to exhaust all rightful means to overcome difficulties (Gifted 6).

My father is strict but my mother is a good team leader of the family. We are encouraged to pursue our interests and develop our talents. They encouraged us to join church and social activities that can help us further develop our abilities (Gifted 8).

It was my mom who always ensured that I excel in class. After school, she would tutor me and would give me a lot of exercises and worksheets (Gifted 9).

I enjoyed their company. They support me in everything I do. They helped me understand peoples' behavior and how to deal with them (Gifted 10).

E. The participants have good relationships with their siblings. The gifted in this study talked about happy moments they spent with their brothers and sisters. While there were times when they had disagreements or arguments at home, their relationship with their siblings remained strong.

I am more open to my sister since she is my twin. She knows well about my strengths, weaknesses, problems, victories, and dreams. We have different temperaments but we have learned to understand each other and support each other's tasks (Gifted 3).

My brother and I are very close, and we bond together by doing different activities, such as playing music together, playing sports such as basketball, and even in playing computer games. (Gifted 4).

My little sister and I are very close to each other. We were playmates during our childhood. Though we have a six-year gap, we can still identify with the interests of each other and laugh at the same jokes. (Gifted 5).

I usually get along with my brothers although we have different personalities and ideologies (Gifted 6).

I enjoyed the company of my siblings. They are loving and very supportive. We make sure to support each other in everything we can (Gifted 10).

F. The gifted learned essential values and important lessons at home. Their parents served as their mentors and guides. They helped the gifted examine their personal values. Their parents taught them to behave properly and to develop good rapport or relationships with other people. Their parents also taught them to have positive personal discipline, to value education, and to dream for a good life. Their parents never failed to remind them to focus on using their gifts to create a good life.

Most important is to make Jesus the center and core of my life because only in Him is true peace found. Further, loving one's work and oneself was always emphasized (Gifted 1).

I have learned simplicity, humility, faith, and perseverance from my parents. These have served as the fundamentals of my life, equipping me with the right tools to face life's battles (Gifted 2).

Without the perpetual reminder of our parents to always be gritty, to persevere, and to value education, I would be misguided and not so adamant about dreaming big and taking necessary steps to pursue success (Gifted 6).

Simplicity, humility, Christ-centeredness, excellence, perseverance, and courage are the values I learned from my parents (Gifted 8).

I learned basic conventions like proper food etiquette and proper occasion etiquette. They would also always remind me of my gender and that I should be careful because I am a woman (Gifted 9).

I learned much of my life skills from my parents (Gifted 10).

G. The participants' families served as their inspiration to be successful. The gifted are aware of the sacrifices of their parents for their families. They want to give their family a sense of pride. They were not pressured to have academic awards in school, except Gifted 9, but it seems natural for them to be successful and strive for accuracy and

perfection in everything they do. This is considered to be a good way of "giving back" to their parents. Helping the family, particularly their parents, is one of the traditional family values.

My family served as my safe zone that defends and protects me from the hostility of life. They also served as my provider, counselor, critic, and comforter (Gifted 1).

They have supported my dreams and endeavors, so they are a huge part of my success. They also taught me that I should learn to be independent. This made me discover and learn things by my own, which boosted my self-confidence and maturity as a person (Gifted 4).

They have always been my inspiration. The sacrifices of my parents and my desire to be a good "kuya" fueled me to work hard for what I am now (Gifted 5).

My family, especially my mother, always serves as my inspiration and my motivation to dream big and pursue things that I think would be helpful both to me and to my family in the long run. They also guided me and helped me both personally and financially to overcome hindrances on the path I am taking (Gifted 6).

My family is basically who I am today. They have been very supportive, especially my parents, in all my endeavors. The never failed to provide (material/non-material) (Gifted 7).

I always considered my parents to be my inspiration in life. I will strive to do my best to become the pride of my family (Gifted 8).

I believe that without their constant nagging and reminder to always be the best versions of us in school, I wouldn't aim extra high. They would always remind us of what we could attain if we study hard and if we have a lot of achievements (Gifted 9).

My family serves as my inspiration in everything I do. They are my constant guides (Gifted 10).

H. There is a feeling of security with their family. The gifted consider their homes to be their comfort zones for all the support they need in life. At home they are happy knowing that they do not need to prove anything.

My family provided financial, emotional and spiritual support in forms of gifts, prayers, kind words, tender touches, advises, and prayers, that allowed me to dream freely and attain such (Gifted 1).

Despite of the fact that our parents were not able to graduate from college, they are doing their best to support our education. Our parents have always been willing to support us in our trainings in school and outside the school. My father always reminds us that our education is the best treasure they can offer to us (Gifted 2).

Our home is safe and secured. It is a place where I can relax after days of tiring work. It also has a welcoming feeling. I think the positive vibe coming from our relationship with one another adds to the good ambiance of our home (Gifted 5).

My family is surely my source of comfort and strength. They surround me with great love and support (Gifted 8).

Our home is a haven for me (Gifted 10).

I. The participants are gifted, but they have always been treated as normal. The gifted grew up normally like their brothers and sisters. They did not receive special attention; instead, they were allowed to experience a normal family environment with no pressure to excel or be a model to their brothers and sisters, except Gifted 9 who is expected to get high grades and academic awards. This helps the gifted in their social adjustment and in the development of their social competence.

We were always treated equally, in my opinion. [There was] No favoritism involved (Gifted 4).

They have a fair treatment. Favoritism was never an issue in the family. We have our differences in terms of our biological sexes, age, and interests. So, different but not unequal treatment was given to us (Gifted 5).

I think our parents are trying their best to be fair to all of us (Gifted 7).

I have not heard my parents compare me to my siblings. I believe my parents consider the differences we have (Gifted 6).

I grew up as a normal child. There is no favoritism at home. I always have a great time with my siblings (Gifted 10).

Filipinos are generally known to be family-oriented. The 10 Filipino gifted in this study are products of a happy family environment. They are all happy to belong to a good family. They were nurtured and supported by families who understand their giftedness and feel proud of their accomplishments. This study affirms that the family plays a vital role in nurturing the giftedness of gifted individuals. This is supported by a study of Gecas and Schwalbe (1986), and Webb, Gore, Amend, and DeVries (2007) where the family is regarded as a place where a child's initial sense of self is formed through intimate, intensive interactions with the significant people in his or her life. These also support earlier studies on the Filipino gifted done by Pawilen (2014), Camara (1994), Mingoa (2006), and Wong-Fernandez and Bustos-Orosa (2007) where family environment and the positive relationship among family members was found to play an important role in the development of Filipinos who are gifted.

The selected Filipino gifted considered their homes to be the major influence in the development of their behavior and giftedness. It can be observed from the responses of the selected gifted participants that they have an intimate relationship with their mothers. The feminine touch of a mother inspired them to develop their talents and pursue their interests. It was also their mothers who inspired and guided them in their academic journey. The hands-on mentoring of their mothers developed their high level of motivation in all their endeavors.

Intellectual environment of the home

The intellectual environment of the home is important in the development and nurture of the selected Filipino gifted. The responses reported here demonstrate the participants' perceptions of this environment.

A. The participants discuss different issues and were trained to analyze and solve problems. The gifted shared common sentiments that their parents are good teachers. They were trained to develop analytical and critical thinking by engaging them in critical discussions about various topics and social issues. Campbell and Verma (2007) pointed out that an academic home climate is an essential environment for the gifted.

Political and theological matters spring out as usual topics of conversation and that such are not considered to be taboo, even if one contradicts the older people, the tradition, and even if one talks about relationships, romance, sex and sexuality (Gifted 1).

Both my parents are academic achievers, and they strongly believe in the value of education. My mom helped me to have a love for books. My dad is good in Mathematics and logic. There is always a craving for information, and we almost always have a newspaper everyday. We also have discourses and discussions during dinnertime about the day's events, politics, news, and anything worth talking about (Gifted 4).

I have always been open to them about my problems in all aspects of my life. My parents just listen, process my thoughts, help me analyze, and encourage me to find solution by myself (Gifted 5).

My family values excellence. We seldom talk of non-sensible things (Gifted 7).

We always have discussions on various issues every night before we sleep. I learned to value history because of this (Gifted 8).

My mother and my sisters are the ones who love reading and studying (Gifted 9).

We do have a lot of intellectual discussions at home. It's like we are in a classroom (Gifted 10).

B. The gifted are encouraged to pursue their own interest and develop their giftedness. The gifted in this study are not products of stage parents. They were allowed to explore possibilities and opportunities to develop their interests and passion for something. Their parents and older siblings are there to provide advice only when needed. This allowed the gifted to make personal decisions and experience taking risks.

I believe my parents have provided us equal support to what we think is important and necessary for us. (Gifted 6)

Their unconditional support motivates and inspires me to keep growing and dreaming (Gifted 2)

I was not that sheltered, my parents made it sure that I would have a well-balanced upbringing by giving me the chance to learn life by experiencing various circumstances by myself. It made me more open and understanding of other persons' perspectives. (Gifted 4)

My mother always reminds us to do our best. She supported us. She always encouraged me to do all the things that can improve myself and so I had many extracurricular activities way back then. (Gifted 5)

My parents were not able to go to college because of poverty. However, they are persistent in encouraging us to do well in our studies. They also taught us some skills in music like playing instruments and voice. They made sure that we have normal lives. Our mother is good in helping us process our problems. (Gifted 8)

My mother encouraged me to pursue my interest in Mathematics. She encouraged me to develop my talents too (Gifted 10).

The intellectual environments of their homes are essential in the development of the gifted. This provides nurture to the intellectual abilities of the gifted. They were exposed to different social issues, they were encouraged to speak out and share their opinions, and they were trained to argue and develop reasoning skills. This made the gifted develops their critical thinking and communication skills. For the Filipino gifted, the role of the mother is essential in supporting the development of their giftedness. Freeman (2001) noted that for all high achievers, the most important influence in their lives has almost always been exceptional support and encouragement from their parents.

The Physical Environment of their Home

The physical environment is also contributory to the development of the selected Filipino gifted in this study. This section describes the physical environment of their homes.

A. The participants live in simple homes. They do not have the luxury that other people and families are enjoying. The gifted in this study grew up in homes that are enough to give them the space they need, equipped with basic amenities.

We have a comfortable and safe home nestled in the countryside, with most of the modern conveniences of life (Gifted 1).

Our home is very simple yet orderly and neat. There is enough space for leisure and study (Gifted 2).

Our home is very simple yet orderly and neat. My mother is very responsible in managing our needs at home. She also wants us to develop such skill so that we can also manage our future families well (Gifted 3).

Our home is a medium sized place, modest but warm. There is always free space to roam around, and there is a big garden at the side. My parents enjoy nature so there are a lot of plants and there are several trees planted in our lot. Our village is not yet that heavily populated so there is still a lot of greenery left. This enhances my way of thinking, and also refreshes the mind during times that I need some space (Gifted 4).

The house is small but enough to accommodate all of us in the family. It is located in a remote area from the town proper. Because of the location, establishments are not readily available (Gifted 6).

Our house is not that big but spacious enough for the five of us. It's basically the standard type of house and nothing much grand inside it (Gifted 9).

We live in a normal urban home. My mother tried her best to provide everything we need (Gifted 10).

B. The participants have books and other resources in their homes that they can use to develop their intellectual skills and abilities.

We have a pretty mini library where encyclopedia, books on theology, history books, and elementary, secondary, and tertiary textbooks abound along with printouts of some academic journal articles (Gifted 1).

Three quarters of my room are devoted to books. We have enough educational resources that we can use at home. We have musical instruments and musical pieces that we can use to develop our music skills (Gifted 4).

My parents are good providers. They try their best to give us lots of learning materials at home, from books to personal computer (Gifted 7).

We aren't rich and so we couldn't afford extra classes and workshops. My mother was always the one who would review me for quizzes and tests (Gifted 9).

We have books, computer, and other resources at home. My mother tried her best to provide everything we need (Gifted 10).

C. Some of the gifted have limited resources for learning and live in simple homes, but they are surrounded by nature. Their context inspired them to develop themselves and to strive for success and develop creative ideas. Nature has its own way to nurture the gifts of the gifted. They did not allow the limits of their environment to impede their giftedness. In fact, they use their environment as inspiration and as a laboratory for pursuing their interests and to dream.

Our house is far from the town proper. Because of the location, establishments are not readily available and we do not have all the resources we need. However, we are surrounded by nature that inspires my creativity to study science and mathematics (Gifted 6).

We have limited resources at home. We borrowed books and magazines from our neighbors. We were taught to be creative and make use of what we have. Farms also surround our house, so I developed my interests of science looking at the insects, local plants, and other objects that make me curious about the world. At night, I would look up to the sky and feel that I am surrounded by science (Gifted 8).

The study stressed the importance of the physical home environment in the development of the gifted. Csikszentmihalyi (2013) pointed out that even the most abstract mind is affected by the surroundings of the body. In this study, the selected Filipino gifted grew up in homes with resources like books and other printed resources, have access to basic technology, and are surrounded by nature. Two of the gifted do not have all the resources they need but they seem

to disregard this. Instead, they study and live happily even in the most dismal surroundings. Weiner (2016) also sets out to examine the connection between the surroundings and the most innovative ideas. According to Weiner, the gifted draws inspiration from their environment to develop ideas and inventions, which contribute to solving problems. This also holds true in this study. The spatiotemporal context in which gifted participants live has consequences in their lives. Csikszentmihalyi (2013) pointed out that regardless of whether the conditions they find themselves are luxurious or miserable, the gifted manage to give their surroundings a personal pattern that echoes the rhythm of their thoughts and habits of action.

Conclusion

The study attempted to describe the home environment of selected Filipino gifted. It subscribes to the idea that the outstanding abilities of the gifted are raw materials that need to be nurtured, and the home environment of the gifted are contributory to the holistic development of the gifted. The 10 Filipino gifted in this study belong to families of different socio-economic backgrounds. They were born with outstanding intellectual abilities and talents. They have outstanding academic performance in various areas and disciplines like mathematics, science, language, music, humanities, and social sciences. They are fully aware of their giftedness, talents, and potentials.

The study concludes that the home environment has a positive impact in the development of the gifted. The study shows that the selected Filipino gifted are products of a positive home environment. Parents who are loving and supportive nurtured them, and equally loving and supportive siblings provided support in the development of their giftedness. These enabled the gifted to develop their self-esteem, social competence, intellectual ability, positive behavior, and high motivation. Furthermore, the study concludes that there is a need to strengthen the family support for gifted students. Educational institutions and professional organizations may need to reach out to parents and families of gifted individuals to help them understand the giftedness of their children and develop ways how to support them. Love, support, and understanding from the family could be the best gifts that a family could give to a gifted person.

References

- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview Press.
- Davis, G., Rimm, S., & Siegle, D. (2011). *Education of the gifted and talented*. (6th Ed.). Upper Saddle River, New Jersey: Pearson.
- Camara, E. (1994). *Highly gifted children: Recognition and management*. (Unpublished Research Report). College of Education, University of the Philippines, Diliman, Quezon City.
- Campbell, J. & Verma, M. (2007). Effective parental influence: Academic home climate linked to children's achievement. *Educational Research and Evaluation*, *13*(6), 501–519. https://doi.org/10.1080/13803610701785949
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.
- Csikszentmihalyi, M. (2013). *Creativity: the psychology of discovery and invention*. New York: HarperCollins.
- Freeman, J (2001). Gifted children grown up. London: David Fulton Publishers.
- Gagné, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly*, 29(3), 103–112. https://doi.org/10.1177/001698628502900302
- Gecas, V., & Schwalbe, M. L. (1986). Parental behavior and adolescent self-esteem. *Journal of Marriage and the Family*, 48, 37–46. http://dx.doi.org/10.2307/352226
- Hennessy, B. A. (2004). *Developing creativity in gifted children: The central importance of motivation and classroom climate*. Storrs, CT: The National Research Center on the Gifted and Talented.
- Knafo, A., & Plomin, R. (2006). Prosocial behavior from early to middle childhood: Genetic and environmental influences on stability and change. *Developmental Psychology*, 42, 771–786. https://doi.org/10.1037/0012-1649.42.5.771
- Mingoa, T. (2006). The making of outstanding Filipino scientists: Implications for enhancing giftedness in science. (Unpublished doctoral dissertation). University of the Philippines, Diliman, Quezon City.
- Page, A. (2006). Three models for understanding gifted behaviors. *Kairaranga*, 7(2), 11–15.
- Pfeiffer, S. and Blei, S. (2008). Gifted identification beyond the IQ test: Rating scales and other assessment procedures. In S. I. Pfeiffer, (Ed.), *Giftedness in children: Psychoeducational theory, research, and best practices* (pp. 177–198). Florida: Springer.
- Lorrader, A. & Ogawa, M. (2015). The development of a self-evaluation checklist for measuring Filipino students' science giftedness. *Asia-Pacific Science Education*, *1*(5), 1–20. https://doi.org/10.1186/s41029-015-0002-0
- Olszewski-Kubilius, P, Seon-Young Lee, & Thomson, D. (2014). Family environment and social development in gifted students. *Gifted Child Quarterly*, *58* (3), 199–216. https://doi.org/10.1177/0016986214526430
- Pawilen, G. (2014). *Developing curriculum standards for gifted students in elementary science*. (Unpublished research). Submitted to the Faculty of Education, Ehime University, Japan.

- Reichenberg A., & Landau, E. (2009) Families of gifted children. In L. V. Shavinina (Ed.) *International handbook on giftedness* (pp. 873–883). Dordrecht: Springer.
- Sternberg, R. J., & Zang, L. (1995). What do we mean by giftedness? A pentagonal implicit theory. *Gifted Child Quarterly*, *39*(2), 88–94. https://doi.org/10.1177/001698629503900205
- Tannenbaum, A. (2003). Nature and nurture of giftedness. In N. Colangelo, & G. Davis, G. (Eds.). (3rd. Ed). *Handbook of gifted education* (pp. 45–59). Boston: Allyn and Bacon.
- Tannenbaum, A. J. (1989). Probing giftedness/talent/creativity: Promise and fulfillment. In P. F. Brandwein, & A. H. Passow (Eds.) *Gifted young in science: Potential through performance* (pp. 39–55). Washington DC: NSTA.
- Webb, J. Gore, J., Amend, E. & DeVries, A. (2007). A parent's guide to gifted children. Scottsdale, AZ: Great Potential Press.
- Weiner, E. (2016). The geography of the genius. New York: Simon & Schuster
- Wong-Fernandez, B., & Bustos-Orosa, A. (2007). Conceptions of giftedness among Tagalog-speaking Filipinos. In S. N. Phillipson, & M. McCann (Eds.), *Conceptions of giftedness: Sociocultural perspectives* (pp. 169–196). Mahwah, NJ: Lawrence Erlbaum Associates.

Corresponding author: Greg Pawilen Contact email: gregpawilen@yahoo.com

Reviewers Volume 6 – Issue 2

The editorial team would like to thank the following reviewers for their contributions to peer review for this issue of the journal. Their dedication and assistance are greatly appreciated.

Christina Belcher Caroline Dacwag Raymond Q Datuon Heloísa Orsi Koch Delgado Tania Fonseca William C. Frick **Shin-ying huang** Lynda Leavitt Marcel Lebrun Jin Lee **Andrew Leichsenring Richard Mather** Catalino N. Mendoza **Massoud Moslehpour** Nomazulu Ngozwana Shinji Okumura Agnes Papadopoulou Cornelius Riordan Akihiro Saito **Bethe Schoenfeld Raimond Selke** Meliha Simsek **Pearl Subban Daniel Velasco Kyle Whitfield** Mai Zaki

Links to full lists of editorial board members and peer reviewers for the *IAFOR Journal of Education* can be found on the journal website: https://iafor.org/journal/iafor-journal-of-education/editors/.

Guide for Authors

Articles should be submitted through the online submission form in Microsoft Word format.

Contributors are expected to submit the initial draft of their paper in the IAFOR Journal house style which is APA (the American Psychological Association), for details see Purdue Owl https://owl.english.purdue.edu/owl/resource/560/01/. If accepted for publication, the paper's style will likely be slightly modified to provide consistency across papers. There may also be minor editorial edits to ensure the academic rigour of the language, grammar and spelling. British and U.S. English are both acceptable, but spelling and punctuation conventions should be consistent with the form of English used. In-text citations rather than footnotes should be used for references to secondary sources. General notes should be in the form of footnotes rather than endnotes, and should not be manually inserted (use Word's automatic formatting).

Generally, contributions should be between 4,000 and 7,000 words in length.

Only papers that demonstrate the following attributes are accepted further.

- Written in correct and fluent English at a high standard;
- Sufficient reference to the current, worldwide, mainstream literature (usually within the last 5 years, and scholarly references, not websites);
- Showing sufficient evidence of research (as a research article or comprehensive review);
- Applicable to the topics covered by the journal.

Please visit the website for author guidelines, the journal's review process, copyright and licencing policy, and the publication ethics statement.

Submit: iafor.org/journal/iafor-journal-of-education/manuscript-submission-form

Author guidelines: https://iafor.org/journal/iafor-journal-of-education/author-guidelines/

Review process: iafor.org/journal/iafor-journal-of-education/about

Copyright and licencing: iafor.org/journal/iafor-journal-of-education

Publication ethics: iafor.org/journal/iafor-journal-of-education/publication-ethics

Contributors for whom English is not a native language are responsible for having their manuscript corrected by a native-speaking academic prior to submitting their paper for publication.

If you have any queries about how to prepare your article for submission, please contact publications@iafor.org.

the iafor journal of education