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# Research Anthology on Nursing Education and Overcoming Challenges in the Workplace

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### **Preface**

Nursing education is crucial to provide those working in the health sector with the ability to care for patients and themselves, as well as to create an inclusive and harmonious workplace. A thorough education is necessary to ensure those working in health professions are well equipped to handle a number of situations and feel confident in their abilities. Today's working world has changed, and it is important to keep up and implement updated technology and tools into schools and workplaces; the nursing education sector is no different. To that end, incorporating updated technology, assessments, best practices, and online learning into nursing education is crucial to provide nurses with the best education to help them in their future careers.

Thus, the *Research Anthology on Nursing Education and Overcoming Challenges in the Workplace* seeks to fill the void for an all-encompassing and comprehensive reference book covering the latest and most emerging research, concepts, and theories for those in the health sector, specifically the nursing field. This one-volume reference collection of reprinted IGI Global book chapters and journal articles that have been handpicked by the editor and editorial team of this research anthology on this topic will empower teachers, nurses, healthcare workers, medical administrators, psychologists, researchers, academicians, and students.

The Research Anthology on Nursing Education and Overcoming Challenges in the Workplace is organized into five sections that provide comprehensive coverage of important topics. The sections are:

- 1. Assessment, Reflection, and Performance;
- 2. Online Learning and Educational Technologies;
- 3. Technology Use in the Workplace;
- 4. Worker Well-Being and Patient Safety; and
- 5. Workplace Culture and Management.

The following paragraphs provide a summary of what to expect from this invaluable reference tool.

Section 1, "Assessment, Reflection, and Performance," provides real-world examples of performance analysis, feedback, and debriefs for nursing students in a variety of situations, as well as the challenges and benefits of online nursing education. The first chapter of this section, "Insights Into an Interdisciplinary Project on Critical Reflection in Nursing: Using SFL and LCT to Enhance SoTL Research and Practice," by Profs. Namala Lakshmi Tilakaratna, Mark Brooke, Laetitia Monbec, Siew Tiang Lau, Vivien Xi Wu, and Yah Shih Chan from the National University of Singapore, Singapore, provides a description of the first stage of an SoTL project consisting of an interdisciplinary research collaboration between nursing disciplinary experts from the Alice Lee Centre for Nursing Studies (ALCNS) and academic literacy

experts from the Centre for English Language Communication (CELC) at the National University of Singapore (NUS). The next chapter, "Ensuring Quality of a Large-Scale Online Assessment for Nursing Students in the 21st Century: A Case Study," by Prof. Emily Ng K.L. from the School of Professional and Continuing Education, Hong Kong University, Hong Kong & Hong Kong Community College, Hong Kong, examines online assessment in nursing education and explores the benefits and challenges. The following chapter, "Creating an Infrastructure to Deliver Meaningful Feedback to Nursing Students," by Prof. Jill Erin Stefaniak from the University of Georgia, USA and Prof. Melanie E. Ross of Northrop Grumman, USA, provides an overview of how a nurse educator utilized a performance analysis approach to providing feedback to nursing students during clinical rotations. The concluding chapter in this section, "Comparison of Baccalaureate Nursing Students' Experience of Video-Assisted Debriefing vs. Oral Debriefing Following High-Fidelity Human Simulation," by Prof. Colleen Royle from Minnesota State University, Mankato, USA and Dr. Kathleen Hargiss, an independent researcher in the USA, explores the comparison of two debriefing processes, video-assisted and oral, by assessing the students' opinion of the debriefing experience and the students' rating of the importance of the debriefing experience and provides further evidence to guide educators to a preferred method of debriefing students after a simulated experience.

Section 2, "Online Learning and Educational Technologies," discusses online nursing education and best practices, teaching strategies, perceptions, and how online education can be used to enhance learning in the nursing field. The opening chapter of this section, "Transforming From the Classroom to an Online Nursing Educator: A Transformative Learning Experience for New Online Nursing Faculty," by Prof. Denise Passmore from the University of South Florida, USA, explores through phenomenological methodology the experiences of nursing faculty who transitioned from live to online teaching. The following chapter, "A Conceptual Model for Cloud-Based E-Training in Nursing Education," by Profs. Ben Soh, Alice S. Li, and Halima E. Samra from La Trobe University, Australia and Prof. Mohammed A. AlZain of Taif University, Saudi Arabia, formalizes a conceptual framework for a cloud-based e-training system in nursing education that takes into consideration nursing e-training system requirements, with a focus on applying cloud computing technologies to ensure the dynamic scalability of virtual distributed services and computing power while maintaining QoS and security. The next chapter, "Online Synchronous Activities to Promote Community of Inquiry in Two Nursing Courses," by Profs. Jennifer Roye and Denise M. Cauble from The University of Texas at Arlington, USA, presents specific teaching strategies to enhance the learner experience in two online nursing courses through the use of synchronous learning activities. Another chapter in this section, "Student Nurses' Perception on the Impact of Information Technology on Teaching and Learning," by Prof. Nahed Kandeel from Mansoura University, Egypt and Prof. Youssreya Ibrahim of Umm Al Qura University, Saudi Arabia, investigates student nurses' perceptions of the impact of using information technology (IT) on teaching and learning critical care nursing. The next chapter, "Nursing Education in the Era of Virtual Reality," by Profs. Derya Uzelli Yilmaz and Sevil Hamarat Tuncalı from İzmir Kâtip Celebi University, Turkey and Prof. Yusuf Yilmaz from Ege University, Turkey, presents some of the many facets of VR in today's nursing education. The following chapter in this section, "Augmented Reality: An Educational Resource for the Nursing Graduate," by Prof. Anabelem Soberanes-Martín from Universidad Autónoma del Estado de México, Mexico, focuses on augmented reality and its incursion in the training of health professionals. Another chapter, "Advancing Emergency Nurse Practitioner Training Using Virtual Nursing Centers," by Prof. Donna Russell of Walden University, USA and Prof. Laura L. Kuensting from the University of Missouri, St. Louis, USA, describes the design of a live emergency room simulation for nurse practitioners using augmented reality and virtual reality and the specific design and development procedures including (1) the design of a learning analytic system for formative and summative assessment, (2) the design of the virtual space for the live event, (3) the development of a timed script for the emergency room event, and (4) the development of the virtual world in Second Life. The final chapter in this section, "Exploring the ICT Competence and Confidence Among Undergraduate Nurses in University of Lagos: Exploring the ICT Competence and Confidence," by Prof. Florence Funmilola Folami from the University of Lagos, Nigeria, explores nursing students' information and communication technology competence and confidence and presents selected findings that focus on students' attitudes towards information and communication technology as an educational methodology.

Section 3, "Technology Use in the Workplace," examines different technology in the nursing field such as electronic records and healthcare management systems and discusses the technologies effect on nurses. The opening chapter in this section, "Factors Impacting Use of Health IT Applications: Predicting Nurses' Perception of Performance," by Prof. Sadaf Ashtari from California State University, Sacramento, USA and Prof. Al Bellamy of Eastern Michigan University, Ypsilanti, USA, addresses the impact of specific factors including result observability, autonomy, perceived barriers, task structure, privacy, and security anxiety on the nurses' perception of their performance using health information technologies. The next chapter, "Human Factors Affecting HMS Impact on Nurses Jobs: HMS Impact in Nursing," by Profs. Tor Guimaraes and Valerie Guimaraes from Tennessee Tech University, Cookeville, USA and Prof. Maria do Carmo Caccia-Bava of the University of Sao Paulo Medical School, Sao Paulo, Brazil, proposes an integrative model and empirically tests the importance of variables as determinants of healthcare management system (HMS) impact on the jobs of nurses and makes recommendations for hospital administrators to improve the likelihood of HMS implementation success. The following chapter, "Developing and Managing Health Systems and Organizations for an Aging Society," by Profs. Ana Filipa Ramos and Adriana Henriques of the Nursing School of Lisbon, Portugal and Prof. César Fonseca from the Nursing School of Évora, Portugal, examines the promotion of self-care as a central issue in public health and the care needs of people aged 65 and over. The concluding chapter of this section, "Perceptions of Medical and Nursing Staff Towards Electronic Records at Selected Private Health Institutions in Zimbabwe," by Prof. Blessing Chiparausha from Bindura University of Science Education, Zimbabwe and Beauty Masceline Makiwa of Three Dreamers Enterprises, Zimbabwe, examines the challenges that are faced by private health institutions' medical and nursing staff when using electronic records, and some solutions to these challenges.

Section 4, "Worker Well-Being and Patient Safety," focuses on the overall health of workers in the health sector related to issues such as burnout, as well as the need to stress the importance of patient care and safety. The opening chapter of this section, "Medical and Nursing Civil Liability and Ethics in the Provision of Health Services: Forensic Pathologists as Experts," by Profs. Theophano Papazissi and Fotios Chatzinikolaou from Aristotle University of Thessaloniki, Greece, summarizes the main points regarding civil liability of medical and nursing activity with a special focus on oncological patients. The following chapter in this section, "The Impact of the Attitude of Medical Staff From Burnout on the Level of Ongoing Medical Services," by Anita Wójcik from 10 Military Hospital, Poland, describes how contemporary, dynamic development in all available human areas is unavoidable and necessary. The next chapter, "Association of Occupational Burnout and Nursing Errors With Patient Safety: A Systemic Review," by Profs. Despoina Pappa and Chrysoula Dafogianni from the University of West

Attica, Greece, synthesizes existing research investigating the association between burnout in health-care professionals with the safety of patient care in the last decade. Another chapter in this section, "Determinants of Patient Safety and Trust With Focus on Health Care Information Technology (HIT) and Physicians-Nurses Performance," by Profs. Mosad Zineldin and Valentina Vasicheva of Linnaeus University, Sweden, assesses and examines the impact health care information technology (HIT) on physician-nurse performance related to patient trust and safety. The final chapter in this section, "Social Representations of Nurses on Medical Safety Culture in Clinical Care for Elderly People," by Prof. Maria do Céu Mendes Pinto Marques from Comprehensive Health Research Center (CHRC), Universidade de Évora, Portugal; Prof. Francisca Tereza Galiza of Universidade Federal do Piauí, Brazil; and Profs. Maria Célia Freitas and Maria Vilani Cavalcante from Universidade Estadual do Ceará, Brazil, analyzes the social representations of nurses regarding the culture of drug safety in clinical care for the elderly people and considers the need for patient safety to become an organizational culture favoring the quality of clinical nursing care in the handling of medicines.

Section 5, "Workplace Culture and Management," examines leadership and management in the nursing world in addition to examining inclusivity and bias in the workplace. The opening chapter in the final section, "The Complex Nuances of Nurse Manager Leadership," by Prof. Seleste Bowers of the University of Phoenix, USA, describes nurses' lived experiences with nurse manager leadership on medical surgical units in Riverside County, California, USA. An additional chapter in this section, "Human Competency as a Catalyzer of Innovation Within Health and Nursing Care Through a Perspective of Complex Adaptive Systems," by Profs. Hironobu Matsushita and Kaori Ichikawa from Tokyo University of Information Sciences, Chiba, Japan and Prof. Paul Lillrank of Aalto University, Espoo, Finland, analyzes some features of nursing manager competencies as a potential agent of innovation through a perspective of complex adaptive systems and identifies key competencies relevant to nursing managers in adopting innovation through a perspective of encompassing complex adaptive systems. A concluding chapter in this section, "Maintaining a Mature Workforce in the Nursing Profession: An HRD Perspective on Retention," by Prof. Torrence E. Sparkman from Rochester Institute of Technology, USA, examines how the dynamics of aging will impact the healthcare system and the wellbeing, recruitment, and retention of nurses. Another concluding chapter, "Becoming a Canadian Nurse With International Experience: Workplace Integration of Internationally Educated Nurses in the Global North," by Dr. Zubeida Ramji of Z. Ramji Associates Inc., Canada and Prof. Josephine Etowa from the University of Ottawa, Canada, conducts a qualitative case study of an inner-city teaching hospital in Canada to examine workplace integration of IENs beyond the transition phase. The next chapter, "Beyond the Pain," by Prof. Cheryl Green of Southern Connecticut State University, USA, discusses inclusionary behaviors and how educating nursing staff on the importance of variations in age, culture, gender, sex, race, ethnicity, and religion in the workplace can help facilitate communication among staff. One of the final chapters in this section, "End of Occupational Segregation in the Nursing Profession: What Has Changed for Female Nurses?" by Profs. Selcen Kılıçaslan-Gökoğlu and Engin Bağış Öztürk from Dokuz Evlül University, Turkey, focuses on how female nurses make sense of their occupations as the perception of their profession changes from gender-biased to gender-neutral and examines how the meaning of the nursing profession and the meaning of work in general is changing for females. The final chapter in this section, "The Search for Support and Healing," by Prof. Cheryl Green of Southern Connecticut State University, USA, provides nurses, nurse leaders, and organizations interventions to understand, confront, and eliminate bullying and incivility from the workplace.

#### Preface

Although the primary organization of the contents in this work is based on its five sections offering a progression of coverage of the important concepts, methodologies, technologies, applications, social issues, and emerging trends, the reader can also identify specific contents by utilizing the extensive indexing system listed at the end. As a comprehensive collection of research on the latest findings related to nursing education, the *Research Anthology on Nursing Education and Overcoming Challenges in the Workplace* provides teachers, nurses, healthcare workers, psychologists, researchers, academicians, students, and all audiences with a complete understanding of the challenges that face those in the nursing education world. Given the importance of complete and relevant nurse education to prepare and enable them to provide the best care to patients as well as take care of themselves, this extensive book presents the latest research and best practices to address various challenges within the field and provide further opportunities for improvement.

# Assessment, Reflection, and Performance

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## Chapter 1

# Insights Into an Interdisciplinary Project on Critical Reflection in Nursing: Using SFL and LCT to Enhance

SoTL Research and Practice

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### **ABSTRACT**

The chapter provides a description of the first stage of an SoTL project consisting of an interdisciplinary research collaboration between nursing disciplinary experts from the Alice Lee Centre for Nursing Studies (ALCNS) and academic literacy experts from the Centre for English Language Communication (CELC) at the National University of Singapore (NUS). This stage includes the creation of appropriate lesson material for teaching critical reflection drawing on Focus Group Discussions (FGDs) with nursing lecturers and the use of 'model' reflective writing texts from high-scoring students in past cohorts analysed using Systemic Functional linguistic frameworks such as genre pedagogy, appraisal, The Legitimation Code Theory tool of semantic waves. The intervention was designed to improve the highly valued skill of 'critical reflection' in nursing undergraduate clinical modules drawing on the use of rigorous theoretical frameworks that make visible salient linguistics resources and knowledge practices drawing on SFL and LCT.

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### INTRODUCTION

This chapter provides a description of the first stage of a SoTL project titled *Reflecting in Undergraduate Nursing:* An Interdisciplinary Approach to Embedding Critical Reflection in Undergraduate Nursing Practice. The project is an interdisciplinary research collaboration between nursing disciplinary experts from the Alice Lee Centre for Nursing Studies (ALCNS) and academic literacy experts from the Centre for English Language Communication (CELC) at the National University of Singapore (NUS) that is supported by a Teaching Enhancement Grant from the university's Centre for Development of Teaching and Learning.

In order to address the SoTL objective to show "how learning is made possible" (Trigwell et al., 2000) through reflection, the project aims to move beyond purely disciplinary understandings of teaching and learning to incorporating a "cross-disciplinary" (Kreber, 2013) description of how nursing students reflect on clinical practice in a manner that is valued by their subject lecturers. The cross-disciplinary collaboration was achieved by drawing on the insight of nursing lecturers in a FGD and the expertise of academic literacy experts through the analysis of student assignments for linguistic features and knowledge practices.

The two FGDs with nursing lecturers aimed to understand critical reflection in the discipline of nursing from the perspective of disciplinary experts. Questions were designed to uncover why nursing staff chose critical reflection as a type of assessment, what they thought the value of such reflections was for undergraduate nursing students, and finally, to understand what counts as "deep" reflection in the discipline. The FGDs were complemented by the analysis of the reflective writing texts from students. The text analysis addresses Shulman's (2005) call for a "comparative study of signature pedagogies across professions" in order to "offer alternative approaches for improving professional education that might not otherwise be considered" (p. 58). To enhance the understanding of critical reflection in nursing clinical practice, texts were analysed through the use of rigorous theoretical frameworks of Genre (Martin & Rose, 2008) and Appraisal (Martin & White, 2005) (Systemic Functional Linguistic theory - SFL) to make visible salient linguistics resources in texts and semantic waves (Maton, 2014; Szenes, Tilakaratna, & Maton, 2015), and to make visible knowledge practices (Legitimation Code Theory - LCT) relevant to nursing reflective practice. SFL and LCT frameworks were employed to uncover deep critical reflection in undergraduate nursing because these two theoretical fields operate "side by side as analytical frameworks providing complementary analyses that are then integrated" (Maton & Doran, 2017, p. 613). The frameworks draw on the academic literacy experts' knowledge of linguistics and knowledge practices and the analysis aims to provide nursing disciplinary experts an "alternative approach" to understanding critical reflection in nursing clinical practice.

The results from the first stage of the project are intended to inform an intervention to improve the highly valued skill of "critical reflection" in nursing undergraduate clinical modules.

A more detailed description of the phases of the ongoing project is outlined in Table 1.

In sharing the results from the first stage of the project, this chapter aims to address one of the concerns in SoTL literature: for disciplinary research to be made transparent for public scrutiny to show how learning is made possible (Trigwell et al., 2000). We begin our article with a brief exploration of how reflective practice in nursing is valued in the context of professional nursing and how it is conceptualised from a disciplinary perspective. This is followed by an introduction to the SFL and LCT frameworks used in this study and a description of the two data sets comprising the focus group discussions and critical reflection assignments. The remainder of the chapter will focus on explaining how the detailed thematic

analysis of the focus group discussions and coding of the linguistic resources and knowledge practices employed by undergraduate nursing students has led to more nuanced and detailed description of critical reflection in clinical nursing practice. We conclude by discussing how the data collection and analysis in Phase 1 of the project has facilitated the creation of appropriate lesson material for teaching critical reflection so that nursing undergraduate students will be able to draw valuable learning from their experiences and emerge as critically reflective practitioners in preparation for future clinical nursing practice.

Table 1. Phases of the SoTL project "Reflecting in undergraduate nursing: An interdisciplinary approach to embedding critical reflection in undergraduate nursing practice"

Project Phase	Activity	Activity Period	Month/Year
Phase 1 – Pre-intervention Student text analysis FGDs, and rubric development	Collection of student assignments and FGDs with lecturers	3 months	July - September 2018
	Analysis of student assignments and rubric development, training of lecturers, and feedback session on rubric	6 months	September – March 2019
Phase 2 – teaching intervention	Creation of online material for flipped classroom content	5 months	March – August 2019
	Intervention stage – delivery of online materials	18 months	August 2019 – December 2020
Phase 3 – Post-intervention	Post-intervention data gathering	12 months	December 2019 - January 2021
Evaluation of project – student assignment analysis, analysis of FGDs with lecturers	Post-intervention evaluation of data	9 months	August 2020- Mar 2021
	Final changes to the lesson material based on post-intervention results	6 months	Jan -Jun 2021

### Reflective Practice in Undergraduate Nursing

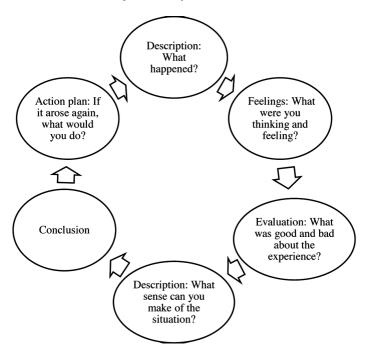
Supportive clinical learning environments and effective coaching by clinical educators are well-documented to have positively influenced student learning outcomes during clinical attachments (Tanda & Denham, 2009). Additionally, nurses in the clinical setting and nursing educators are aware that the clinical environment within which nursing education occurs is dynamic and encompasses complex variables. This means that students do not always have positive experiences in the clinical setting (O'Mara et al., 2013). Additionally, the authors acknowledge that educators can facilitate students' capacities in reflection and generate ideas for coping and transforming future situations (O'Mara et al, 2013). Reflection is now regarded as an essential capacity and core to self-regulation and learning (Mann, 2016).

Needless to say, nursing educators need to be developed first in order to adequately support the development of students' reflection skills. According to Dekker-Groen (2013), there is a growing consensus that effective professional development of academic teachers should include the following core features: content, active learning, coherence, duration, and collective participation (Desimone, 2009; Garet et al., 2001; Penuel et al., 2007). "Content" refers to knowledge about what the students should learn from their reflection and knowledge about the teaching activities required to support students' learning from their clinical experiences. Moreover, providing feedback on students' reflection by the academic teacher

or clinical facilitator is identified as one of the key strategies used to facilitate meaningful reflection. Therefore, the goal is for students to eventually develop critical thinking and social awareness in the process of thinking about and interpreting situations, events, experiences, and emotions that have occurred.

Recent research on critical reflection in the ALCNS Bachelor of Nursing programme identified that students write reflections that are predominantly descriptive in nature despite the use of frameworks such as Gibb's (1998) "Reflective Cycle" as a model for the process of reflection (Wu et al., 2016a; Wu et al., 2015). Gibbs' (1988) Reflective Cycle, a well-known framework in this field (see studies from Burns et al., 2000; Husebø et al., 2015; and Reid, 1993; Wu et al., 2015; and Wu et al., 2016), is used as a model to guide critical reflections and includes six stages: *Description* of the experience; *Feelings* about it; *Evaluation* (positive and negative) of the experience; *Analysis* to develop understanding of it; *Conclusion*, describing learning and how the event might have been differently managed; and *Action plan*, telling how a different approach might be taken in the future if this problem emerges again. This last criterion implies that practitioners experience a transformation in their practice. Figure 1 provides a visual representation of this model.

Figure 1. Adapted from Gibb's (1988) Reflective Cycle



The first stage of the project attempts to address the lack of depth in undergraduate critical reflection at the ALCNS by asking the following research questions:

What constitutes "deep reflection" in clinical nursing practice?

How can we make "deep reflection" explicit and visible in creating effective pedagogic interventions? How can we identify the impact and outcome of teaching "deep reflection" through measuring student learning?

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