

## Special Article

## The AEIOU Mnemonic: Using Vowels to Facilitate Caring

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### Abstract

Learning experiences must be designed which challenge students to explore nursing from ontological and epistemological perspectives. Educational strategies necessitate utilizing the student's experiential knowledge as a catalyst for adopting "curiosity" about their future practice to ensure competent, safe, and ethical nurses. Nurse educators must ensure graduates' capacity to acquire, appraise, and reflect on disciplinary and practical knowledge to enhance their future nursing practice. A unique learning strategy – "*The AEIOU Mnemonic*" (Assessment, Education, Implementation, Outcomes, and Understanding of the Lived Experience) and clinical case studies, grounded in caring sciences, were developed to foster clinical-reasoning and decision-making in a pre-licensure nursing program.

**Key words:** caring, learning, mnemonic, nursing student, teaching

### Background

Nursing education has both an epistemological and ontological purpose. Fostering the development of clinical-reasoning and decision-making skills in which to assist graduates to respond efficiently and effectively to clients who have complicated health issues within a complex healthcare system often reflects the epistemological nature of nursing. The ontological purpose is often less visible or may not be sufficiently nurtured. However, it is the belief of the authors that the development of knowledge, skills, and attributes grounded in caring sciences encompasses both ontological and epistemological purposes.

*Caring*, as theoretical and practical knowledge, challenges nurses to move beyond merely tasks; encouraging them to also focus on the relationship between the nurse and the client as unique beings (Roach 2002). Holism resists a purely biomedical approach or definition where a person is reduced to the sum of their parts (Watson & Smith 2002). Therefore, a nurse who embodies a holistic perspective is by nature of

their being, *caring*. Knowledge integration from both caring and holistic perspectives fosters the nature of nursing as a noun - creating a vulnerable space where both the client and the nurse live and construct meaning of their shared experiences (Gadow 1995). As nurses we create this meaning through risk – recognizing the frailty of the human spirit which reflects both our humanity and vulnerability giving rise to a unified voice. We bring knowledge of our bodies, values, expectations, gender, sexual identity, culture, and many more experiences of being in the world to shape our connections with others and facilitate this unified voice.

Therefore, unique learning experience was designed to reflect this dual purpose for third year nursing students in a baccalaureate program. First, a mnemonic framework was created "*The AEIOU Mnemonic*" (Assessment, Education, Implementation, Outcomes, and Understanding of the Lived Experience) grounded in disciplinary and practical nursing knowledge informed by caring sciences. Secondly, case studies of prevalent diseases and treatment plans

were developed utilizing a nursing lens and contextualized in diversity (client, health setting, and complexity).

The AEIOU Framework guided the analysis and application of practical and disciplinary knowledge in the case studies in a theory course and the accompanying lab component to enhance nursing students' continued progression of clinical-reasoning and decision-making skills. Caring sciences knowledge, skills, and attributes were nurtured through the reflective questions included in the AEIOU framework. For the purpose of this paper, *caring*, will reflect both the ontological and epistemological purposes of nursing.

### **Background**

Recognizing the complexity of both content and context as well as limited clinical experience prompted Maykut to design the AEIOU mnemonic and case studies for the theory course. Hung provided critique and suggestions to ensure appropriateness and relevance as well as further development of the case studies for lab application. This learning experience occurred during the 2015-2016 academic year. The authors, a tenured faculty member and a contractual member have a combined 29 years of nursing education and 48 years of clinical practice to draw upon in the development and implementation of the mnemonic and case studies. Maykut's research focuses on curriculum development for student success grounded in caring sciences.

### **Caring**

Grounding one's practice in caring sciences, both ontologically and epistemologically, encourages the nurse to embody caring, as a way of being. This way of being is reflected in the nurse's aptitudes and practices consistent with beliefs about one's professional role; informed by cognitive, affective, technical, and administrative knowledge and actions (Roach 2002). Commitment, compassion, conscience, confidence, competence, and comportment as caring attributes enable the nurse to connect with another in their shared humanity; this connection is intentional and reflects how we care and respect self and others (Roach & Maykut 2010). The sharing of narratives occurs in a privileged

and vulnerable space reflective of intentional actions.

Understanding the context of this vulnerable place is vital to ensure the nurse embodies a caring perspective to guide their practice as well as creating a space for the client and themselves. The client's narrative sets the context for an individualistic plan of care in partnership with the nurse. Recognizing the importance of both the client and the nurse's narrative allows for engaging with the other, exploring the nature of health and humanity, and embodying or creating shared meaning of their lived experience. Caring, as a way of being, must be introduced, role-modeled, and applied during formal nursing education; creative and engaging learning strategies embodying this concept are vital.

### **Mnemonics**

As nurse educators we are accountable for disseminating and interpreting knowledge as well as cultivating and sustaining curiosity for learners. The student's capacity to engage in acquisition, reflection, and critique of this knowledge to enhance future nursing practice is a vital outcome of nursing education (Gross Forneris & Peden-McAlpine 2007; Ruth-Sahd 2013). Mnemonics, as a method, may provide context for the learner building upon previous knowledge with the assistance of something familiar (Sweda, Mastropieri, & Scruggs 2000), increasing retention of new knowledge (Heather & Gibson 2009), while fostering thinking and reasoning (El Hussein & Jakubec 2015; Levin et al. 1990).

### **The AEIOU Mnemonic**

#### **Description of the Mnemonic**

As children we are taught the alphabet, comprised of both consonants and vowels, in which to build words to communicate with others; recognizing that vowels anchor consonants, both of which provide meaning and become the building blocks of fundamental language. These letters give rise to the ability to articulate our thoughts, beliefs, and values; our narrative. The familiarity of this simple skill set from childhood became the mnemonic to foster caring and the continued progression of clinical-reasoning and decision-making skills.

The AEIOU mnemonic is not an exhaustive tool but was designed as expansive in nature with unlimited possibilities; encouraging students to continually add depth to each vowel from their own experiential awareness and future disciplinary and practical knowledge. This continued exploration and development should ensure a caring approach - holistic and inclusive in their nursing practice. This tool then becomes a map for the relationship between the nurse (nursing student) and the client to chart a shared journey of discovery.

Inclusiveness is a vital perspective of the mnemonic; challenging the student to think beyond reducing and objectifying the client by focusing solely on psychomotor skills from a pure medical paradigm. Students learn to remove binary oppositions (health-illness), monolithic views (knowledge as proprietary for the nurse), and objectifying the client as body and move to embodying caring. Recognizing caring occurs only when as nurses we recognize the vulnerable space of this relationship, especially for the client, and humbly invite them to enter this shared space with humility honouring their story by encouraging voice. The value of this mnemonic for practice will be highlighted through the following case study.

### Case Study

Although this particular case study is from an acute care perspective, the mnemonic was used in a variety of contexts. Each case study was developed to encourage students to engage in clinical-reasoning and decision-making in the classroom as well as a basis to ensure an approach for psychomotor performance in the lab grounded in caring sciences. The content in the case studies reflected peer-reviewed and grey literature, as well as evidence-informed nursing practice to successfully meet course and program outcomes.

Sandra is a 20 year old woman who is in her second year of a BScN program (a fictitious narrative). Her ethnic background is Cree and she is from *Maskwacis*, Alberta, Canada (A First Nation's Community). During Reading Week she went to Mexico with her girlfriends where they decided to get tattoos. Six weeks later she presents to the emergency room with a fever, chills, persistent cough, and extreme SOB. She is diagnosed with endocarditis and started on a six

week course of intravenous antibiotics following insertion of a peripherally inserted central catheter. She identifies with the GRSM (gender, romantic, sexual, minority) (Galupo, Lomash & Mitchell 2016) community.

**Assessment (A).** Within the health history, assessment is the first step which sets the context of the relationship by inviting the introduction of the story – the narrative. Thorough and relevant assessments guided by critical reasoning and reflection evolve with experience (Forsberg, Ziegert, Jult & Fors 2015; Purling & King 2012). Caring is reflected in the assessment of both Sandra and the nurse, as well as the environment in which the relationship has been created.

Who we are as individuals informs and influences who we are as professionals. Ascertaining one's personal beliefs and values helps to determine barriers preventing or catalysts fostering the creation of a caring relationship. If caring, as a way of being, is to be embodied the nurse must perform a critical reflection of their strengths and gaps, both from a personal and professional perspective, prior to creating space for a relationship with Sandra. This foundational analysis supports the nurse to create space for Sandra to enter recognizing vulnerability of both in the relationship. Sandra enters into the relationship from a place of vulnerability; often lacking control over circumstances, being unfamiliar with the environment, and experiencing emotional chaos. Therefore, the initial step is establishing a mutual description and purpose of the relationship; a space where both are able to establish purpose for this shared experience (Doane & Varcoe 2007; Gadow 1995).

Information gathered from health questions and either a thorough or focused physical assessment, whichever is warranted due to the nature of the context, establishes the foundation of the story. Gathering information on items such as: the nature of the visit from Sandra's perspective, allergies, medications (prescribed, over the counter, and herbs), and previous medical/surgical admissions are nonthreatening questions which may assist in further sharing and development of the narrative. As Sandra moves through her story, questions of a more personal nature: housing, income, and social safety network, not exhaustive of the social

determinants of health (Mikkonen & Raphael 2016), are necessary to ensure a thorough understanding. Physical assessment necessitates moving into another's personal space and touching which should be recognized as part of this privilege relationship (Walsh & Kowanko 2002). The nurse must remember that we do not reduce Sandra to body-mind-spirit but integrate all aspects to reflect bodymindspirit.

This bodymindspirit perspective must be incorporated as part of the nurse's assessment. The nurse should invite questions from Sandra to ensure clarity, collaboration, and connection. I, as the nurse, must initially check my beliefs and assumptions on an ongoing basis as Sandra tells her narrative to reflect and use a personal inquiry approach; determining if I am listening or interpreting or influencing Sandra's story and not being judgemental. Questions to initiate this reflection may include:

- Do I have preconceived beliefs and values of Sandra and her culture (age, ethnicity, gender, sexual orientation, etc.)?
- How do I honour differences while building on our similarities to facilitate a mutual understanding?
- How do I utilize language and presence to foster a space for shared meaning?

**Education (E).** The purpose of education is to acquire knowledge to understand both content and context. Nurses must utilize theory to guide their practice leading to knowledge translation; a dynamic and iterative process (Smylie, Kaplan-Myrth & McShane, 2009). This acquisition of theory enhanced by experiential knowing and informed by narratives should reflect a practice which is safe, competent and ethical. As nurses we need to recognize and critique alternate venues of knowledge (i.e. social media) which may foster engagement and/or autonomy by increasing sources of knowledge for Sandra or recognize when connection is hindered by adding yet another barrier between nurse-client.

Competent, safe, and ethical care is not only informed by disciplinary and practical knowledge but also by narratives which shape the context of the experience. This experience must honour the diversity and recognize the humanity of the other to co-create shared meaning. Shared meaning will establish the

context, trust in the other, from which agreed upon content will be utilized to foster health. However, as nurses we must recognize that there are many barriers which may prevent shared-decision making; including individual and organizational characteristics.

A context where the power differential is minimized should be the first step prior to sharing and optimizing knowledge. Sandra must have comprehensive, relevant, and current knowledge to inform her choices and thus become autonomous in her actions. The following questions, for the nurse, are important concepts to address prior to sharing knowledge with Sandra:

- How do I utilize recommendations from the *Truth and Reconciliation* (Truth and Reconciliation Commission of Canada 2015) to inform my nursing practice to foster inclusiveness and create shared meaning?
- What do I know and need to know ensure a caring approach (not exhaustive: cultural norms, ethics of care, growth and development, pathophysiology, pharmacology, psychology, physiology, sexuality, spirituality, and technical knowledge)?
- What are the policies and procedures at an institutional level as well as resources; ethical, clinical, and decision making frameworks which shape my practice?
- What barriers might prevent Sandra from engaging in shared-decision making (time, cognitive factors, organizational structure, culture, age, gender, sexual orientation, etc.)?
- What does Sandra already know and/or wants to know; utilize knowledge acquired during her first two years of the nursing program as well as personal knowing to promote health?

**Implementation of a Plan of Care (I).** As the context where the relationship is situated, a thorough examination of how best to support both Sandra and the nurse is warranted. The nurse must understand the strengths and limitations of the health system they are practising within recognizing both the complexity and ambiguity. A mutually agreed upon "plan of care" results from shared power and the dissemination of knowledge between Sandra and the nurse. The plan of care is shaped by commonly understood achievable goals and realistic outcomes in which to foster health.

Fostering health for Sandra is of utmost importance; a multidisciplinary approach and support is essential for attaining goals. However, the nurse must be aware of contextual factors (not limited to time and financial) which may prevent or limit success and plan accordingly. A mutually agreed upon plan of care with a goal of optimizing health should foster capacity building as an outcome for Sandra. Adhering to this plan of care may be less difficult while supervised in a tertiary setting but may prove problematic when transitioning to home. The nurse must clearly understand the context of “home” to overcome any issues which may prevent actualizing the plan of care. Questions which may guide the development of a plan include:

- Should “evidence-informed” or “best interest of the client” be the guiding principle or is a combined approach the most advantageous?
- What experience, knowledge, policy and procedures and/or practice standards may facilitate the development of a plan of care?
- What resources human (interdisciplinary team), technology, and/or community may assist in the implementation of a plan of care?
- Where is home and who is included in Sandra’s support system?

**Outcomes (O).** Reflexivity is a vital component of evaluation performed by the nurse resulting in a critical reflective practice (Thompson & Pascal 2012). This practice, as suggested by Thompson and Pascal must include analysis of theory, actions grounded in ethics, and fostering professional growth; moving beyond reflective practice. This critical perspective, self-awareness and self-insight, fosters creativity by continually asking questions and challenging assumptions about both process and outcomes.

The act of evaluation may promote nursing accountability while facilitating further professional development as nurses recognize both their strengths as well as areas for improvement during this reflective inquiry. Intentional action on the knowledge acquired during this reflective practice informs future connections with Sandra and future clients by acquiring the competence to teach others. Evaluation is a key step in determining the effectiveness of the implementation of care as well as the satisfaction both Sandra and the nurse have with the relationship. Nurses must

recognize contextual factors which may hinder and promote success of the plan of care; including institutional demands. Administrators of healthcare systems want quality of care and adherence to safety within financial responsibility. Therefore, a balance must be achieved between healthcare system performance and client satisfaction; recognizing competing interests with respect to both human and non-human resources.

Evaluation is a mutually shared responsibility between Sandra and the nurse and key indicators of success must be defined in advance mutually such as “*How will we define success?*” Acting on the knowledge gathered to inform future practice demonstrates commitment to caring as a way of being. Evaluation of Sandra’s progress may in turn fostering autonomy and empowerment with the following key questions to guide this process:

- What are the gaps in my knowledge, are my assumptions, beliefs and values in sync with the other, and what can I do to rectify this situation?
- What is the progress of the plan of care; progression is evaluated on a continuum (from not met to fully met)? What and who determines effectiveness of the plan of care; multiple elements - established benchmarks from healthcare systems, Sandra’s perspective, as well as mutually agreed upon goals?
- How can this plan be modified to ensure optimization of health for Sandra?

**Understanding (U).** Following evaluation, is a contemplative journey to understand the humanity expressed in the caring moment (Roach 2002). Understanding this lived experience of both Sandra and the nurse is critical to cultivating a holistic approach exemplified in a caring moment.

As nurses we need to constantly reflect on our actions, assumptions, beliefs, and values in which to inform our future selves. This process of reflexivity will nurture the essence of our humanity which is the ultimate expression of caring (Roach 2002) we have to offer as nurses. “One becomes authentically human as one’s capacity to care is called forth, nurtured, and expressed” (Roach 1997, p. 14). Reflexivity, as

the lifelong journey of a caring professional may be guided by the following questions:

- How will I foster relational inquiry?
- How will I express my humanity as a nursing student?
- How will I epitomize caring attributes (commitment, compassion, competence, comportment, confidence, and conscience) (Roach 2002) as I enter into a relationship with another?
- How have I been influenced, both personally and professionally, during this experience?

### Discussion

Reflexivity, as a contemplative journey, for both authors was ongoing individually and as a cohesive teaching team. This intentional journey created an opportunity for discourse on teaching and learning as both art and science, continual knowledge acquisition of caring sciences, as well as reciprocal mentorship. This educational endeavor was challenging and rewarding for both authors as they created a learning experience where students valued caring as foundational for their future practice.

### Limitations

As this was a limited one term only learning experience (due to assignment of teaching courses) the inability to implement for a second time was lacking. Further developing the AEIOU mnemonic is necessary to ensure that this learning strategy does not hinder the development of clinically sound nurses who embody caring – which was the purpose.

Finally, encouraging the implementation of this learning strategy by other nurse educators, both at MacEwan University and other nursing programs, may foster dialogue on purposes of higher education, the necessity of creative learning strategies, and the importance of caring sciences.

### Research and Clinical Implications

Utilizing a “Scholarship of Teaching and Learning” approach would be invaluable to ascertain both content and context of this learning strategy to inform professional development of the authors. Application to other nursing courses and/or other nursing programs

may provide support for this learning strategy. Also of interest is application of this mnemonic in clinical areas (acute care and community) to determine effectiveness as a transition mnemonic for ongoing development of clinical-reasoning and decision-making grounded in caring sciences for both nursing students and practicing clinicians.

### Conclusion

Nursing students must transition into practice fluidly and competently; understanding and responding appropriate to context intentionally. As students struggle with remembering, applying, and prioritizing learning experiences creative strategies assisting in new learning experience is crucial not only for their current success but also for transitioning into practice.

Fostering a smooth transition is a contract between the nursing student and higher learning (Gross Forneris & Peden-McAlpine 2007). Therefore, educational strategies necessitate utilizing the student’s experiential knowledge as a catalyst for adopting “curiosity” about their future practice to ensure competent, safe, and ethical nurses grounded in caring sciences. This learning experience, mnemonic and clinical case studies, was designed to illustrate to the nursing student the importance of clinical-reasoning and decision-making while fostering the transition from the classroom to the clinical setting by encouraging students to see beyond the skills.

Meaning and purpose is created when we, the nurse, recognize the vulnerability of our clients and humbly invite them to enter this shared space honouring their story, encouraging their voice.

Embodying a caring approach reflects the belief that each of us (both client and nurse) must have a voice to ensure a thorough understanding of this privilege shared journey; where nursing is a noun – a vulnerable space which awaits meaning and transformation (Gadow 1995). Ultimately, we must ensure graduates’ aptitude to acquire, appraise, and reflect on disciplinary and practical knowledge to enhance their capacity to recognize the intrinsic value of the relationship between the nurse and the client (Roach 2002).

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## References

- Doane G. H., & Varcoe C. (2007) Relational practice and nursing obligations. *Advances in Nursing Science* 30(3):192–205
- El Hussein M., & Jakubec S. L. (2015) An alphabetical mnemonic teaching strategy for constructing nursing care plans. *The Journal of Nursing Education* 54(1):57-59.
- Forsberg E., Ziegert K., Jult H., & Fors U. (2013) Clinical reasoning in nursing, a think-aloud study using virtual patients – A base for an innovative assessment. *Nursing Education Today* 34(4):538-542.
- Gadow S. (1995) Narrative and exploration: Toward a poetics of knowledge in nursing. *Nursing Inquiry* 2:211-214.
- Galupo M. P., Lomash E., & Mitchell C. (2016) “All of my lovers fit into this scale”: Sexual minority individuals’ responses to two novel measures of sexual orientation. *Journal of Homosexuality* 4:1-21.
- Gross Forneris S., & Peden-McAlpine C. (2007) Evaluation of a reflective learning intervention to improve critical thinking in novice nurses. *Journal of Advanced Nursing* 57(4):41-421.
- Heather A., & Gibson M. A. (2009) Using mnemonics to increase knowledge of an organizing curriculum framework. *Teaching and Learning in Nursing* 4(2):56-62.
- Levin J. R., Johnson D. D., Pittelman S. D., Levin K. M., Shriberg L. K., Toms-Bronowski S., Hayes B. L. (1990) A comparison of semantic-and mnemonic-based vocabulary-learning strategies. *Reading Psychology* 5:1-15.
- Mikkonen J., & Raphael D. (2010) *Social determinants of health: The Canadian facts*. Toronto: York University School of Health Policy and Management. Retrieved from [http://www.thecanadianfacts.org/the\\_canadian\\_facts.pdf](http://www.thecanadianfacts.org/the_canadian_facts.pdf). 2010. Retrieved August 16, 2016
- Purling A., & King L. (2012) A literature review: Graduate nurses’ preparedness for recognising and responding to the deteriorating patient. *Journal of Clinical Reflective Practice in Nursing* 21:3451-3465.
- Roach M. S. (1997) Reflections on the theme. In, Roach MS (Ed.) *Caring from the heart: The Convergence of caring and spirituality* (pp. 7-20). Mahwah, NJ: Paulist Press.
- Roach M. S. (2002) *Caring, the human mode of being*. Ottawa, Ontario: Canadian Hospital Association.
- Roach M. S., & Maykut C. (2010) Comportment: A caring attribute in the formation of an intentional practice. *International Journal for Human Caring* 14(4):22-26. Available from <http://internationaljournalforhumancaring.org/>
- Ruth-Sahd L. A. (2013) A call to action: Nursing education must embrace change and move forward. *Dimensions of Critical Care Nursing* 33(1):28-33.
- Smylie J., Kaplan-Myrth N., & McShane K. (2009) Indigenous knowledge translation: Baseline findings in a qualitative study of the pathways of health knowledge in three indigenous communities in Canada. *Health Promotion Practice* 10(3):436-446.
- Sweda J., Mastropieri M. A, Scruggs T. E. (2000) Putting mnemonic strategies to work in an inclusive classroom. *Learning Disabilities Research & Practice* 15(2):69-74.
- Thompson N., & Pascal J. (2012) Developing critically reflective practice. *Reflective Practice* 13(2):311-325.
- Truth and Reconciliation Commission of Canada. *Truth and reconciliation commission of Canada: Calls to action*. 2015; Retrieved August 19, 2016 from [http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls\\_to\\_Action\\_English2.pdf](http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf)
- Walsh K., & Kowanko I. (2002) Nurses’ and patients’ perceptions of dignity. *International Journal of Nursing Practice* 8(3):143-151.
- Watson J., & Smith M. (2002) Caring science and the science of unitary human being: A trans-theoretical discourse for nursing knowledge development. *Journal of Advance Nursing* 37(5):452-461.