Why you should read this article:
- To learn about the semantic wave and Legitimation Code Theory
- To understand how the semantic wave can be applied to improving nursing practice
- To develop ideas as to how you can implement the semantic wave when teaching students

Using the semantic wave to support intellectual disability nursing students to apply theory and evidence in practice

Liz Hartnett and Martin McNamara

Abstract

This article details how a conceptual tool, the semantic wave, can be used to support intellectual disability nursing students to access and apply theories, concepts and evidence to inform their practice. The semantic wave can enable nurse preceptors in Ireland – and practice supervisors and practice assessors in the UK – to articulate the links between theory and practice when supporting nursing students to develop foundational competences on their practice placements.

This article uses a case study of a nurse preceptor supporting a first-year intellectual disability nursing student to develop their competence in communication and interpersonal relationships, demonstrating how the semantic wave can be used to apply nursing theory to context-specific practice situations.

Author details

Liz Hartnett, lecturer, School of Nursing, Psychotherapy and Community Health, Dublin City University, Dublin, Ireland; Martin McNamara, professor, School of Nursing, Midwifery and Health Systems, University College Dublin, Dublin, Ireland

THROUGHOUT THEIR four-year undergraduate programme, nursing students in Ireland learn to apply evidence to practice. Intellectual disability nursing draws on diverse disciplinary knowledge bases – including nursing, medicine, pharmacology, psychology, sociology and physiotherapy – to provide evidence to inform practice. It is important for nursing students to be able to select and critique the best available evidence to apply to particular practice situations.

This article introduces the semantic wave, an important concept from Legitimation Code Theory (Maton 2014), and explains how it can assist nurse preceptors to support nursing students to apply theory and evidence in practice. In Ireland, nurse preceptors support undergraduate nursing students to develop their competences while on they are on practice placements, in the same way that practice supervisors and practice assessors would do in the UK.

Using a case study, the authors demonstrate how the concept of the semantic wave can be used to support nurse preceptors to demonstrate the application of evidence to practice when supporting the person with an intellectual disability living in a community group home. The semantic wave provides nurse preceptors with a conceptual tool that can enable them to articulate, visualise and plan the support that nursing students need to select and apply the most appropriate, relevant and productive concepts to inform their practice.

Supportive nurse-person relationships

An essential aspect of intellectual disability nursing is the development and maintenance of a supportive nurse-person relationship to support individuals with intellectual disabilities with their health and social care needs (Gates and Mafuba 2015, Hartnett 2020). Therefore, intellectual disability nursing students need to develop competence in establishing supportive nurse-person relationships.

The literature describes the relationship between the nurse and person as a foundational element of intellectual disability nursing practice (Gates and Mafuba 2015), and the formation and maintenance of these relationships is considered central to the professional identity of this field of nursing (Hartnett 2020). Essential information about the person is acquired though the supportive nurse-person relationship, enabling the nurse to support them in various aspects of their life (Crotty and Doody 2015, Hartnett 2020). Examples of such support may include assisting the person to arrange and attend healthcare and multidisciplinary team appointments and to take part in chosen social activities in their local community.

It is important that nursing students are able to draw on theory and evidence to inform the development and maintenance of supportive nurse-person relationships. In Ireland, the Nursing and Midwifery Board

of Ireland (NMBI) (2016) has developed a framework of competences required for entry to the professional register of nurses, comprising six domains (Box 1), which provides guidance for nursing students as they progress through their undergraduate programme.

Domain four of this framework, communication and interpersonal competences, most directly applies to the supportive nurse-person relationship, stating that nurses require: 'knowledge, appreciation and development of empathic communication skills and techniques for effective interpersonal relationships with people and other professionals in health care settings.' The wording foregrounds the theory that students need to inform the development of their communication and interpersonal competences. Similarly, in the UK, the Nursing and Midwifery Council (2018) standards of proficiency detail the communication and relationship management skills that registered nurses require.

Nurse preceptors support nursing students throughout their practice placements to develop competence in each of the six domains. Wheelahan (2010) emphasised how important it is that students are able to discern the 'rules of the game' – that is, the bases of success and markers of achievement in any practice – in their discipline when accessing and critiquing theories, concepts and research

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Box 1. Competences required for entry to the professional register of nurses in Ireland

» Domain 1 – professional values and conduct of the nurse competences
» Domain 2 – nursing practice and clinical decision-making competences
» Domain 3 – knowledge and cognitive competences
» Domain 4 – communication and interpersonal competences
» Domain 5 – management and team competences
» Domain 6 – leadership and professional scholarship competences

(Nursing and Midwifery Board of Ireland 2016)

Key points

- Legitimation Code Theory is a framework that was developed in the late 1990s and is concerned with the factors that enable or constrain the development of knowledge in education contexts

- Each element of the framework seeks to make the bases of success of any practice, such as intellectual disability nursing, explicit. By making them explicit, it can enhance the understanding of intellectual disability nursing students of how to acquire the knowledge, skills and attributes that are required to provide effective, person-centred care

- The semantic wave is one aspect of Legitimation Code Theory that can be used to make explicit the bases of success

- The semantic wave enables nurse preceptors to articulate and plan how they can support their students effectively to navigate their learning between context-specific practice situations and the selection of appropriate theory and evidence to inform their nursing practice

evidence for application to practice. Therefore, intellectual disability nurse preceptors need to make these 'rules' clear and enable their students to access and critique theories, concepts and evidence to apply to their practice.

Applying theory and evidence in practice-based disciplines

Winberg (2017) asserted that, in practice-based disciplines, the theories, concepts and evidence base that inform practice are often implicit and not articulated clearly. She emphasised the need to identify precisely which theories and concepts inform practice, how and with what effects.

Legitimation Code Theory is a multi-dimensional framework that was developed in the late 1990s by Karl Maton (Maton 2014). It is primarily used in the sociology of education, and is motivated by concerns about social justice, access to academic ideas that can transform identities and practices, and the factors that enable or constrain the development of knowledge in a variety of education contexts.

Each dimension of the framework explores the underlying principles that structure disciplinary and professional fields and practices, enabling an analysis of 'what is possible for whom, when, where and how, and who is able to define these possibilities, when, where and how' (Maton 2014).

In this way, it seeks to make the bases of success of any practice explicit. This has important implications for social justice in education, since these markers of success and achievement can then be taught and learned, as well as challenged and changed (Winberg et al 2020).

In intellectual disability nurse education, the bases of academic and professional success need to be made explicit so as to support nurse preceptors and nursing students in selecting and applying theory and research evidence to practice (Hartnett 2020). Illustrating the bases of success for students can enhance their understanding of how to acquire the knowledge, skills and attributes that are required to provide effective, person-centred care (Maton 2014). Legitimation Code Theory (Maton 2014) offers a variety of analytic concepts and tools that can be used to illustrate these bases of success, one of which is the semantic wave.

Semantic wave: applying theory to practice

The semantic wave is a useful concept that nurse preceptors can use to illustrate the bases of success, and therefore support nursing students to access and apply theory, concepts and research evidence to practice.

Figure 1 shows the use of the semantic wave in applying theoretical concepts to a practice situation. It provides nurse preceptors with a readily visualised concept that enables them to articulate and plan how they can support their students effectively to navigate their learning between context-specific practice situations and the selection of appropriate theory and evidence to inform their nursing practice. The vertical axis represents the relative strength of semantic gravity (SG). The horizontal axis represents progression of learning over time, for example the nursing student's development

Figure 1. Use of the semantic wave in applying theoretical concepts to a practice situation
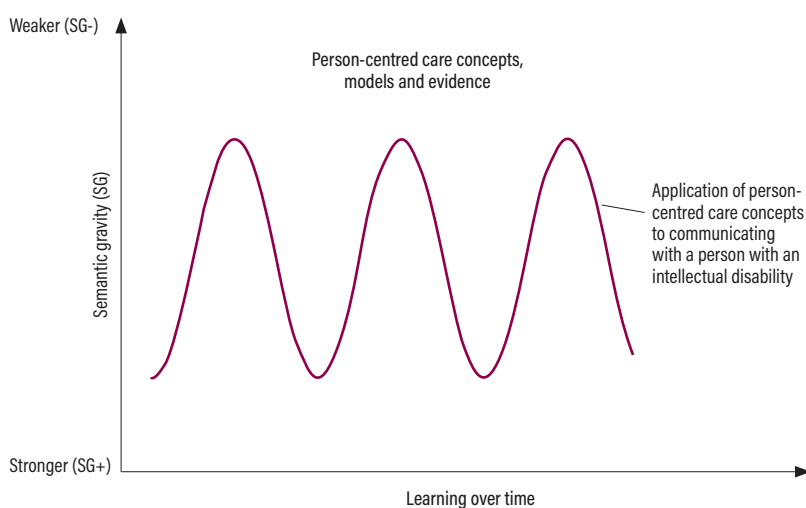
(Adapted from Maton 2014)

of competences over the course of a practice placement.

SG focuses on the extent to which practices depend on the specific practice area context; those that are more tied to the specific context have relatively stronger SG (SG+), while practices that are less tied to the specific context have relatively weaker SG (SG-).

Maton (2014) shows how the concept of SG can be used by educators such as nurse preceptors to select theories, concepts and research evidence at a relatively high level of abstraction (SG-), then support nursing students to understand these and appreciate their relevance and significance by progressively strengthening SG to enable them to apply the ideas and evidence to a particular case and to real practice situations that they experience. Moving up and down the semantic wave creates opportunities for intellectual disability nursing students to acquire and apply the necessary theory, concepts and research evidence that underpins competence in communication and interpersonal relationships.

Case study

The use of the semantic wave is illustrated by the hypothetical case of Fiona, a first-year intellectual disability nursing student who is on her first practice placement in a community group home for adults with an intellectual disability. Fiona is developing her competence in establishing interpersonal relationships. May, her nurse preceptor, emphasises to her the importance of taking a person-centred approach when communicating with a person with an intellectual disability. While Fiona has a vague idea that the concept of person-centredness means placing the person at the centre of all care interventions, she is not clear on how to communicate with Ian, one of the community group home residents, in a person-centred manner. May asks Fiona to explain how she will communicate in a person-centred manner, but Fiona finds this challenging to articulate.

Trouble with articulating important concepts in intellectual disability nursing has been recognised as an important issue for education and practice (Gates 2006, Gates and Mafuba 2015, Hartnett 2020). It could be suggested that challenges in articulating the conceptual bases and distinctive contribution of intellectual disability nursing has led to it being considered to be a marginal field of nursing that is often unable to promote its value to health and social care systems (Sheerin 2012, Hartnett 2020). In Fiona's university programme, nurse preceptors are encouraged to use the semantic wave to structure learning so as to assist nursing students to 'reach up' to theory and research evidence and to select sources to then 'bring down' and apply to context-specific practice situations that they experience.

With May's assistance, Fiona uses the idea of the semantic wave (Figure 1) to enable her to articulate person-centred approaches to communication. Encouraged to weaken SG and move up the semantic wave, Fiona recalls nursing theory she covered while writing an essay on person-centred approaches. Fiona reviews the essay and revisits the concepts offered by Brown et al's (2016) model of compassionate, person-centred care and McCarron et al's (2018) framework for the development of intellectual disability nursing, which is focused on person-centred care. May encourages Fiona to consider this theory and to select aspects from it that may inform how she communicates with Ian.

Fiona selects the aspects of autonomy, respect, dignity, choice and compassion, and reflects on how these concepts might inform her communication with Ian. For example, Fiona draws on McCarron et al's (2018) framework to ensure that all her communications with Ian about his short-term and long-term life plans support him to make informed choices. This involves engaging with Ian about accessing and understanding of information relevant to his plans and explaining how

this information can assist him to make his own informed choices. At the end of her shift, May asks Fiona if it is now easier to discuss how she will communicate with Ian. Fiona is now able to explain how she selected concepts at a relatively high level of abstraction at the 'crest' of the semantic wave (SG-) then progressively strengthened SG (SG+) to show how the abstract concepts of respect, dignity and autonomy informed her overall approach to communicating with Ian.

Fiona can now also articulate how the concepts of compassion and offering choice in activities of daily living were important context-specific aspects of how she communicates daily with Ian. The semantic wave can be used with all six NMBI (2016) domains of competence, from year one to year four (Box 1).

This example of supporting Fiona to develop her communication and interpersonal competences demonstrates how abstract theoretical concepts that inform intellectual disability nursing can be applied in a systematic and principled manner to context-specific practice situations.

Conclusion

The concept of the semantic wave provides a method of visualising how theory and practice can be considered in relation with one another during a practice placement or any learning episode. Preceptors can encourage students to move up and down a series of waves, reaching up to and selecting theory, concepts and research evidence, then moving back down to apply them to practice and evaluate their usefulness in real-world contexts.

The semantic wave can support intellectual disability nurse preceptors to develop learning episodes that enable their students to apply theory and evidence to practice situations that they experience. For nurse preceptors, the concept of the semantic wave assists in clarifying and articulating for students the important ideas that underpin practice, how these are applied to practice and with what effects. This offers preceptors opportunities to develop confidence in expressing the distinctive disciplinary contribution of intellectual disability nursing to health and social care, and subsequently instilling that confidence in their students.

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