Original research

The Blended Reflective Inquiry Educators Framework; origins, development and utilisation

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A B S T R A C T

Reflective practice is widely considered to be an integral part of contemporary pedagogical practice in higher education. The integration of reflection and reflective practice into professional education curricula in areas such as nursing, education and the social sciences, has coincided with an expansion of the reflective practice literature which continues to proliferate within a range of disciplinary fields. However, an interesting paradox is beginning to emerge whereby educators who are charged with developing students reflective ability are often required to do so in the absence of practical educator-focused frameworks and/or guidelines. The purpose of this paper is to contribute to the debate by presenting the 'Blended Reflective Inquiry Educators Framework' which is designed for educators who wish to support students to develop their reflective abilities and reflective capacity. This innovative framework was developed following a two stage action research study which was designed to investigate how registered nurses can be facilitated to develop reflective practice skills and abilities. The study resulted in the development of this innovative educator's framework which uses an inquiry based, blended learning approach, to facilitate reflective practice.

1. Introduction

The ability to engage in reflective activity is recognised as an essential characteristic of professional competence, with many professions incorporating reflection and reflective practice into their undergraduate, graduate and continuing professional development programmes. However, the development of a robust pedagogical evidence base to guide educators in the facilitation of reflection has failed to develop apace. The issue is further compounded by an awareness that higher education is in a period of transition driven by developments in learning technology coupled with a new student demographic who demand more from their university experience than the traditional lecture format. Blended learning has emerged as one mechanism which helps to bridge this metaphorical gap between faculty and student. However, it is imperative that such a structure is built upon solid pedagogical foundations. The purpose of this paper is to present the Blended Reflective Inquiry Educators Framework (BRIEF) which is designed for educators from any discipline who wish to support students to develop their reflective abilities and reflective capacity. The BRIEF which was developed from the Community of Inquiry framework as devised by Garrison et al. (2000) is predicated on the operationalisation of three presences; social, cognitive and teaching presence. The BRIEF includes a set of 12 innovative recommendations for educators which

are designed to provide practical guidance for those who wish to use an inquiry based, blended learning approach, to facilitate reflection. It also includes an evaluation strategy that is aimed at encouraging educators to consider investigating the impact and efficacy of their teaching and learning experiences.

2. The paradoxical positionality of reflective practice in higher education

Donald Schön is one of the most influential contemporary writers on reflective thinking, having produced what are considered to be the seminal texts in this area: *The Reflective Practitioner* (1983) and *Educating the Reflective Practitioner* (1987). Schön's views were heavily influenced by theorists, such as Dewey, Freire and Mezirow, all of whom played important roles in developing the view that professional learning is a transformative process through which individuals are encouraged to critically examine and learn from their interpretations of an experience (Bulman and Schutz, 2013). Reflective practice occupies a pivotal position in contemporary professional education with the concept of the reflective practitioner as advocated by Schön (1983) tending to be more dominant in the professions associated with education, health, and social care. However, teaching and facilitating reflective practice, particularly within higher education inhabits a rather

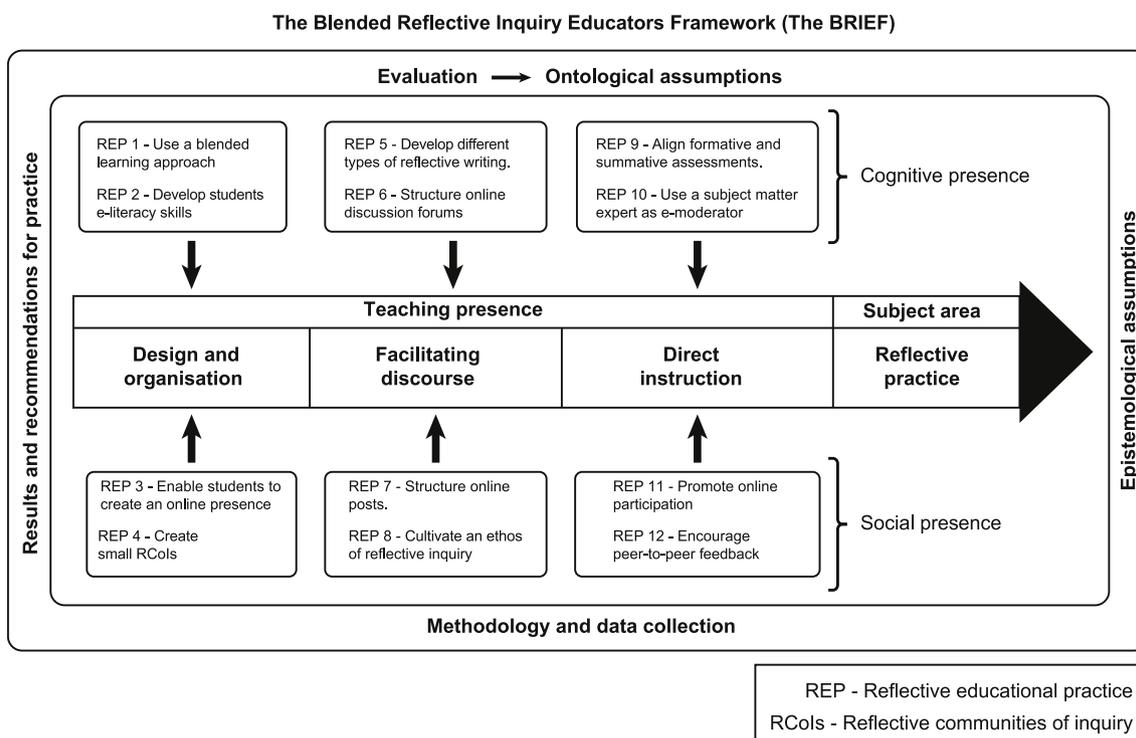**The Blended Reflective Inquiry Educators Framework (The BRIEF)**

Fig. 1. The blended reflective inquiry educators framework.

paradoxical position between the aspirational rhetoric of reflection and the harsh reality of educational practice. The prevailing rhetoric which extolls the virtues of developing students as reflective practitioners is at variance with the educators experience of a relatively limited pedagogical evidence base to guide such development at a practical level. Mann et al. (2009) who conducted a systematic review of reflective practice in health professions education noted that despite reflections currency as a topic of educational importance, there is surprisingly little to guide educators in their work to understand and develop reflective ability in their learners. Similarly, Van Beveren et al. (2018) who conducted a systematic review of reflection in teaching, social work and psychology education concluded that while the reflective practitioner has become a central feature in higher education, critical empirical perspectives on the concept remain limited. Redmond (2017) who explored the development of reflective practice in health and social services, articulates the view that creating an educational environment where ones students can appreciate the subtleties of reflective practice is quite a complex endeavour. From a nursing perspective Rolfe (2014) argues that reflective practice has failed to deliver a new philosophy of nursing practice and education largely due to the way in which reflection is misunderstood, misinterpreted and misapplied by nurse educators, theorists, managers and practitioners. Yet despite the various challenges and complexities associated with facilitating reflective practice, professional licensing and validation bodies increasingly require practitioners to provide evidence of reflective capacity and/or ability. This leaves educators in the rather unenviable position of being required to support their students to develop reflective skills in the absence of clear pedagogical guidance and support. It is this rather mercurial paradox, between reflective rhetoric and educational reality, that prompted the inception and subsequent development of the BRIEF.

Another key driver in the development of the framework arose from the need to acknowledge that the teaching of reflective practice does not occur within an educational vacuum. As previously stated the contemporary higher education climate is one where students expect technologically enhanced learning opportunities that capitalise on the development of innovative digital platforms. This is not to say that technological solutions alone offer an all-encompassing educational

panacea. Rather it is to recognise the role that one approach i.e. blended learning, can play when it is operationalised in accordance with proper procedures and practices. Consequently, blended learning should be seen as an opportunity to redesign how courses are developed, scheduled, and delivered through a combination of physical and virtual instruction and not merely as a technological addition to a traditional course (Bleed, 2001). Garrison and Vaughan's definition is particularly helpful in this regard as they conceptualise blended learning as the "organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies." (Garrison and Vaughan, 2008, p.148). It interesting to note however that Taylor et al. (2018) who conducted a comprehensive review of blended learning in higher education in the decade between 2007 and 2017 identified that one of the main challenges occurred at the level of individual faculty i.e. in trying to communicate the definition of blended learning to professors. The need for more support for course redesign and better professional development and training was also highlighted (Taylor et al., 2018).

It is against this background that the Blended Reflective Inquiry Educators Framework was developed. In the first instance the framework provides a comprehensive and robust tool for educators from any discipline who wish to facilitate students to reflect. However, it also provides this process within the context of a blended learning environment. This approach to blended learning offers the educator the opportunity to reimagine the educational transaction between faculty and students, so that the various elements of design, content and delivery are interwoven into a unique educational tapestry. It is in fact the co-creation by faculty and students alike, of an impactful and bespoke learning experience, that is the true raison d'être of blended learning.

3. The Community of Inquiry framework

The BRIEF (Fig. 1) has its origins in the Community of Inquiry (CoI) framework which was devised by Garrison et al. (2000) as part of a Canadian Social Sciences and Humanities research funded project. The aim of the Canadian study was to develop a tool to guide the use of computer-mediated communication and computer conferencing in

higher education (Garrison et al., 2000). The Community of Inquiry framework which emerged from that project represents a process of creating deep and meaningful, collaborative-constructivist, learning experiences through the development of three interdependent elements – cognitive, social and teaching presence. While the definitions and interpretations of each of these elements were modified since the models inception, cognitive presence is considered to relate to the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison et al., 2001). Social presence relates to the ability of participants in a CoI to "project themselves socially and emotionally as real people through the medium of communications being used" (Garrison et al., 2000, p. 94). Finally teaching presence, the third mutually reinforcing element in the CoI framework is defined as the "design, facilitation and direction of cognitive and social presence processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson et al., 2001, p. 5). In practical terms the model is operationalised from the perspective of teaching presence and its three dimensions: design and organisation, facilitating discourse, and direct instruction. In this way, issues pertaining to social and cognitive presence are addressed in accordance with the development of each dimension of teaching presence. A visual representation of the CoI framework and its three presences is presented in Fig. 2- Elements of an Educational Experience. The CoI has become one of the most influential online learning frameworks in higher education with the initial CoI article, published by Garrison et al. (2000) being cited 4596 times on Google Scholar at the time of writing. An archive of the original article and much of the subsequent work can be accessed from http://communitiesofinquiry.com/.

4. Developing the Blended Reflective Inquiry Educators Framework

The development of the Blended Reflective Inquiry Educators Framework was informed primarily from the findings of a two-stage action research doctoral study designed to investigate how a blended learning approach could be used to facilitate nurses to reflect on clinical practice. Action research (AR) is an umbrella term that represents a family of research practices (Bradbury-Huang, 2010) which aim at both taking action and creating knowledge and theory about that action as the action unfolds (Coughlan, 2019). Adopting an AR approach was particularly valuable in the development of this framework as it facilitated the lecturer to adopt the dual role of educator and researcher

Fig. 2. Elements of an educational experience.
Source: Garrison et al. (2000) reproduced with permission from Elsevier Science Inc.

while simultaneously enabling a real change in practice, which could be explored and evaluated. As Kemmis (2010) states action research concerns action, and transforming people's practices, as well as their understandings of these practices and the conditions under which they practice. However, it is important to note that adopting an action research approach also presented a variety of challenges. Accessing the required professional development and skill set to both design and redesign the action research intervention within the academic calendar was problematic. Guiding and mentoring students through a process of actual educational change with which they were unfamiliar also proved challenging. Furthermore, as an insider researcher ensuring that the study adhered to good ethical practice required a particular focus and ongoing commitment. Nolen and Putten (2007) note that informed consent, participant autonomy, and the coercive potential of action research are among the primary ethical concerns in educational action research. Consequently, particular care was taken to ensure that the students were provided with sufficient information both verbally and in writing to enable them to choose whether to participate. Students were assured as to the voluntary nature of participation, steps taken to ensure anonymity and the students right to withdraw from the study at any time without any penalty. Furthermore, the ethical component of the study was specifically reviewed and closely monitored on an ongoing basis by an experienced academic in educational research. A detailed application addressing these specific issues was submitted to the University Research Ethics Committee, following which permission to conduct the study was granted.

The two-stage action research study began by utilising the CoI framework to design a reflective learning unit for registered nurses who were studying part-time for a degree in nursing. In action research cycle one, an online reflective practice resource was developed in accordance with the CoI framework which invited students (n = 61) to post reflective summaries of critical incidents to small online communities. Students received feedback on their reflective writing from the course moderator and peers. Action research cycle 1 was evaluated by conducting focus group interviews with the participants to ascertain their experiences of the learning unit. An analysis of the computer conference transcripts was also conducted to determine the type of reflective writing produced by the students online. The analysis process involved the development of the Reflective Writing Coding Instrument, which was specifically designed to determin the type of reflective writing produced. The instrument which is presented in Fig. 3, is based on the four types of reflective writing, as identified by Hatton and Smith (1995) (i.e. descriptive writing, descriptive reflection, dialogic reflection and critical reflection). Each type of reflective writing is presented as defined by Hatton and Smith (1995). A modified description of each type of writing to specifically reflect the clinical nursing context is also presented. The actual coding process was governed by the Reflective Writing Coding Protocol which is presented in Fig. 4. The process required two coders. In Stage 1 (independent coding) each coder independently assigned a type of reflective writing to each student post, e.g., descriptive writing, descriptive reflection, dialogic reflection or critical reflection. In Stage 2, (negotiated coding), the coders reviewed the postings for agreement. Where they were not in agreement, they attempted to negotiate a consensus. Where agreement could not be reached, the postings were transferred to Stage 3 (expert coding), where an expert provided the final adjudication. In this way a type of reflective writing was assigned to each students online post.

The evaluation from the first action research cycle demonstrated that the CoI process and the online communities in particular were viewed by the students as facilitating the development of their reflective abilities (Donohoe et al., 2009). Consequently, the CoI process and the learning unit were revised and implemented with a second group of nursing students (n = 9), in action research cycle 2. The efficacy of the second cycle was then evaluated by analysing the online computer conference transcripts and by conducting semi-structured interviews with individual students to ascertain their experiences of

Type of Reflective Writing	Description (Hatton & Smith, p 49, 1995)	Interpretation within a clinical nursing context. (May include some or all of the indicators outlined below)
Descriptive Writing (DW)	*Not* reflective. Description of events that occurred/report of literature. No attempt to provide reasons/justification for events.	The post is **not reflective** The student **describes** the events that occurred during the critical incident/clinical situation. There is no evidence that the student has attempted to provide **reasons/justifications** for the actions/events that occurred.
Descriptive Reflection (DES REF)	Reflective, not only a description of events but some attempt to provide reason justification for events or actions but in a reportive or descriptive way. For example, I chose this problem-solving activity because I believe that students should be active rather than passive learners. Recognition of *alternate* viewpoints in the research and literature which are reported. Two forms:- (a) Reflection based generally on one perspective/factor as rationale. (b) Reflection is based on the recognition of multiple factors and perspectives.	The post contains **evidence of reflection**. The student describes the events that occurred during the critical incident/clinical situation. There is evidence that the student has attempted to provide some reasons/justifications for the action(s)/events that occurred. For example the student may have attempted to analyse their action with reference to good nursing practice. The **reasons/justifications** provided by the student are **descriptive in nature**. There is some evidence that the student recognises that in relation to this critical incident/clinical situation, there are alternate viewpoints in nursing practice and/or in the research literature.
Dialogic Reflection (DIA REF)	Demonstrates a stepping back from the events/actions leading to a different level of mulling about, discourse with self and exploring the experience, events, and actions using qualities of judgments and possible alternatives for explaining and hypothesising. Such reflection is analytical or/and integrative of factors and perspectives and may recognize inconsistencies in attempting to provide rationales and critique.	The student demonstrates an ability to • step back from the critical incident/clinical situation and engage in a discourse with self. • analyse the situation from a **variety of perspectives** (e.g. of patients, relatives, healthcare professionals) • recognise **inconsistencies** in relation to nursing practice. The student explores **alternative ways** to address the issues involved in the critical incident/clinical situation. Relevant literature is used to support the discussion.
Critical Reflection (CRI REF)	Demonstrates an awareness that actions and events are not only located in, and explicable by, reference to multiple perspectives but are located in, and influenced by multiple historical, and socio-political contexts.	The student demonstrates an awareness that nursing practice is influenced by • **Multiple perspectives** at Local, National and International levels. • **Multiple contexts** e.g. social, political, historical and/or cultural contexts, at Local, National and International levels. Relevant literature is used to support the discussion.
Not Coded (NC)	Text indicates online presence but student does not contribute to the discussion. Message is very brief and is indicative of listening online.	Student states that they have read the online post but does not engage in a discussion. Student posts references/citations but does not indicate how these relate to their reflection.

Fig. 3. The reflective writing coding instrument*.

using the resource. While the study demonstrated that the Community of Inquiry Framework could be used to design a blended learning experience that facilitates nurses to reflect with varying degrees of efficacy (Donohoe, 2012), the results also showed that the CoI process required a number of modifications to make it more applicable for developing student reflection. These modifications centred around the visual representation of the CoI process, the need to include prompts that specifically encourage reflective activity and the need to integrate an evaluation strategy. Therefore, when designing the BRIEF these three distinct yet interrelated features were included.

Firstly, the BRIEF is presented in the form of a modified Ishikawa diagram which clearly positions teaching presence along the spine of the model. Thus, the central role of teaching presence within the CoI approach is clearly represented and the pivotal position of the three dimensions of teaching presence (design and organisation; facilitation; and direct instruction) are emphasised. A further strength of the BRIEF is that it emphasises that the model should be operationalised from the perspective of teaching presence and its three dimensions, while also demonstrating how issues pertaining to cognitive and social presence

can be addressed concurrently, as they relate to each of the three dimensions of teaching presence. Presenting the BRIEF in this way clearly illustrates the dynamic interplay between teaching, cognitive and social presence in a way that is not evident in the original diagrammatic depiction of the CoI framework.

The BRIEF also includes a series of 12 reflective educational practice (REP) prompts. Each prompt is designed to facilitate the educator to specifically develop student's reflective capacity. It is important to note that the student is not seen as a passive or benign actor within the educational transaction. As previously stated the BRIEF is designed to enable the co-creation by faculty and students alike, of an impactful and bespoke reflective learning experience. The framework recognises student agency and encourages both independent and collaborative reflection. Similarly, each prompt is designed to encourage the educator to be reflective in their own educational practice. While the BRIEF can be used as a guide to support the development of student reflection, educators should be mindful that one guide does not fit all as there can be variability between students/groups/classes even when the subject matter remains relatively constant. Therefore, the educator is reminded

Coding Stage	Coding Process	Coding Actions
Stage 1	Independent Coding	• Each coder independently codes the computer transcripts. • A code is presented for each post. • Each coder signs the coding results for Stage 1. • Each coder retains 2 copies of the results from each coder (1 hard copy and 1 electronic copy)
Stage 2	Negotiated Coding	• The posts where coders are not in agreement are identified. • The coders attempt to reach agreement on each post. • Where agreement cannot be reached, posts are transferred to Stage 3. • The coders co-sign the coding results for Stage 2. • Each coder retains 2 copies of the final results from the 2nd Stage. (1 hard copy and 1 electronic copy)
Stage 3	Expert Coding	• The expert provides the final adjudication for any post that was outstanding from Stage 2. • The expert signs the coding results for Stage 3. • Each coder retains 2 copies of the final results from the Stage 3. (1 hard copy and 1 electronic copy)

Fig. 4. The reflective writing coding protocol.

to engage in reflective educational practice as the unit of study/module progresses. In this way the BRIEF is designed to act as a scaffold which can assist both educators and students to iteratively co-construct a bespoke educational experience that is truly reflective and impactful in nature.

The final element relates to the inclusion of an evaluation strategy. Rourke and Kanuka (2009) who conducted a review of the literature on learning in CoIs concluded that more substantial studies of learning using the CoI framework were required. Therefore, the BRIEF also includes an evaluation element which is designed to prompt educators to investigate their teaching and learning experience in a reflective and innovative manner.

5. Utilising the Blended Reflective Inquiry Educators Framework

The following discussion outlines how the BRIEF can be used to facilitate the development of student reflection and reflective writing. Where necessary, examples and findings from the study conducted by Donohoe (2012) are used to illustrate how the various elements of the framework are operationalised in practice.

Teaching presence and its three dimensions (design and organisation; facilitation and direct instruction) act as the pedagogical engine that drives the BRIEF, with cognitive and social presence being addressed concurrently as the educational programme unfolds. A series of 12 prompts are provided which invite the educator to engage in reflective educational practice while an evaluation strategy encourages educators to investigate their teaching and learning experiences. Operationalisation of the BRIEF begins with the first element of

teaching presence; design and organisation.

6. Design and organisation

This first element of teaching presence addresses the macro-level structures involved in the design and organisation of an educational experience (Garrison and Anderson, 2003). REP 1 and REP 2 foster cognitive presence by promoting the inclusion of design/organisational features that facilitate the construction of meaning in relation to the reflective process, while REP 3 and REP 4 foster social presence by prompting the inclusion of design/organisational features that enable learners to develop and interact as reflective practitioners.

6.1. REP 1- use a blended learning approach

In the first instance the educator should utilize evidence based approaches that facilitate reflection to inform the macro design of the learning unit/module. For example, a number of teaching/learning methods are identified in the nurse education literature as being important in the facilitation of reflection (Ruth-Sahd, 2003). These include but are not limited to the use of reflective practice groups (Platzer et al., 2000a); reflective writing (Chirema, 2007) and the promotion of a safe environment (Platzer et al., 2000b). By utilising a blended learning approach students were facilitated to work in Reflective Communities of Inquiry (RCoIs) (reflective practice groups), by utilizing online posts (reflective writing) within moderated online communities (safe environments). It is this interactive blend between the face-to-face and online elements of the reflective practice learning unit

that students identified as being particularly important in developing their reflective knowledge. Furthermore, students stressed that their understanding of reflection only evolved over time, a factor that was similarly identified by Mann et al. (2009) and Duke and Appleton (2000). Consequently, the BRIEF advocates that a reflective learning unit/module should be delivered over the course of an academic semester or year, thereby providing students with the requisite time and space to develop reflective capacity.

6.2. REP 2-develop e-literacy skills

A central feature of the BRIEF is that it is designed to encourage students to view their clinical experiences through the lens of evidence based practice. Therefore, students require good information literacy skills which involves demonstrating an awareness of how they gather, use, manage and synthesise information and data in an ethical manner in the development of knowledge and understanding (Forster, 2015). However due to the proliferation of information technology, students are also required to be e-literate i.e. to possess the skills to combine information literacy with IT literacy (technology) in the concomitant quest to create new information (Beatty and Mountifield, 2006). While the students value the ease of access to relevant online library databases and e-journals, some can find adjusting to the online element of the programme quite challenging. McVeigh (2009) identified that attaining and developing e-literacy skills can be particularly difficult for post registration nursing students with computer literacy, accessibility and time pressures being key factors in influencing their utilisation of e-learning. Therefore, REP 2 encourages the inclusion of design features aimed at promoting information management and e-literacy such as ensuring direct access to pertinent online library data bases and ensuring that the requisite IT support is available both face to face (F2F) and online.

6.3. REP 3- enable students to create an online presence

As previously stated developing social presence involves enabling the participants to project themselves socially and emotionally as real people through the medium of the communication being used (Garrison et al., 2000). In a reflective context, the emphasis is on enabling participants to project themselves as emerging and evolving reflective practitioners. Consequently, REP 3 prompts the educator to include design features that require students to create an online presence. This can be achieved by encouraging students in the first instance to develop an individual home page within the VLE where they can share information pertinent to their professional background and areas of clinical expertise. Students can then review these homepages and create reflective communities of inquiry (RCoIs) with peers of their choice. These two related activities are particularly successful in developing a sense of belonging both within the group as a whole and also within the individual RCoIs. As Garrison and Anderson (2003) have identified, a sense of belonging provides group cohesion and the resulting security facilitates open communication. Designing this type of secure yet open environment is central in facilitating students to share their reflective experiences both F2F and online.

6.4. REP 4 –create small RCoIs

Another key design feature relates to the size of the RCoIs and REP 4 proposes that the size of online groups should be kept as small as is reasonably practicable. Small groups are considered preferable in creating an environment that supports reflection. Manning et al. (2009) and Platzer et al. (2000b) propose that a group of six is optimal for facilitating reflection in traditional F2F settings. The size of online groups can range in general from three to six students. While this type of group structure can help to create a climate of openness, trust and support, the small group size militates against extraneous cognitive

load, a feature that can result from poorly designed e-learning activities (Van Merriënboer and Ayres, 2005).

7. Facilitating discourse

The second element of teaching presence, facilitating discourse, recognises the CoI as a mechanism for enabling and encouraging the construction of personal meaning and shaping/confirming mutual understanding (Garrison and Anderson, 2003). The BRIEF builds on the CoI process by incorporating four recommendations for educational practice. REP 5 and REP 6 foster cognitive presence by encouraging the development of different types of reflective writing though the use of structured online discussion forums while REP 7 and REP 8 foster social presence by encouraging the use of structured online posts that create a culture of reflective inquiry.

7.1. REP 5-develop different types of reflective writing

An important feature of the BRIEF is that it provides a guide for educators who wish to facilitate the development of reflective writing, a process that is recognised as being complex and difficult to master (Bowman and Addyman, 2014). Hatton and Smith's (1995) typology was used as a schema to both teach and structure reflective writing. This typology consists of four types of writing: technical writing; descriptive reflection; dialogic reflection and critical reflection. A particular strength of Hatton and Smiths (1995) work is the recognition that reflective writing is developmental in nature and while there is a progression towards critical reflection, all types of reflective writing are considered to be of value. The application of this typology enabled the development of F2F learning activities that demonstrated and perhaps more importantly differentiated between each of the four types of writing. Once a particular type of writing was introduced during the F2F sessions, students were then invited to participate in an online discussion forum to work towards mastering that particular type of writing. The specific elements of this process are presented in greater detail in the following section, REP 6.

7.2. REP 6-structure online discussion forums

REP 6 requires that individual discussion forums are structured and interlinked. The process begins with Discussion Forum 1 which is designed to foster the development of technical writing which is described by Hatton and Smith (1995) as a description or report of events. Students are required to post a structured reflective account of their critical incident to Forum 1 using a technical writing approach. Similarly, Forum 2 is designed to foster Descriptive reflection; which is characterised by attempts to provide reasons or justifications for events or actions taken (Hatton and Smith, 1995). Thus, in Forum 2 students revisit the incident but this time are encouraged to provide reasons for the various actions taken based primarily on personal judgments/opinion. The third forum addresses Dialogic reflection which is generally demonstrated as a stepping back from the events/actions, leading to a discourse with self. The experience, events, and actions are explored using qualities of judgement where alternative actions are considered (Hatton and Smith, 1995). In this forum students are actively encouraged to utilise their information and e-literacy skills (see REP2) to substantiate their reflective accounts with reference to the literature and to focus on developing an evidence based approach to the situation. Finally, Discussion Forum 4 addresses Critical reflection which is the fourth type of reflective writing identified by Hatton and Smith (1995). This type of writing demonstrates an awareness that actions/events are not solely influenced by multiple perspectives but are also located in, and influenced by, multiple historical, and socio-political contexts. Attaining critical reflection is recognised as being challenging (Whipp, 2003) and consequently additional educational scaffolds should be utilised. For example, in the F2F sessions students are encouraged to

view their critical incident from a variety of perspectives (e.g. historical, political, economic, social etc.) and to use literature from these broader areas to explore their respective critical incidents. Thus reflective writing is incrementally and explicitly developed throughout the course of the programme through an integrated system of online discussion forums.

7.3. REP 7-structure online posts

Merely forming and posting to an online forum does not inherently lead to student learning and there is evidence to suggest that online discussions require careful structuring if they are to support reflective learning (Whipp, 2003). REP 7 proposes that a predetermined framework is used to structure individual student posts so that learning and reflection can occur. The student is required to select one recent incident from their reflective practice diary in which they were an active participant. The incident should be one that they are comfortable sharing with their reflective community of inquiry and one which they plan to explore further in their summative assessment. (See REP 9 Align formative and summative assessments). The student posts a succinct summary of the incident using the elements of the practical inquiry model as devised by Garrison et al. (2000) (i.e. triggering event, exploration, integration, and resolution). As the student examines the incident from inception (trigger) through to resolution, they are prompted to test the efficacy of various solutions vicariously within the supportive confines of their online communities. Peer support and advice foster a sense of social presence and members become invested in trying to resolve one another's clinical issues. The structure also provides uniformity to the posting process which enables students to readily engage with and respond to one another's reflections on clinical practice. It is important to note however that a significant limitation of this approach to reflection is that it takes time for students to develop trust within the online communities. Students also need practice in terms of posting and responding online. However, a key strength of the blended approach is that the face-to-face element affords the educator the opportunity to foster group cohesion and trust which can then be transferred to the online environment.

7.4. REP 8 - cultivate an ethos of reflective inquiry

Dewey (1938 p 104) defines reflective inquiry as "the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations so as to convert the elements of the original situation into a unified whole". Drawing on Dewey's work, Parsons (1983) suggests that reflective inquiry curricula should provide students with the dual opportunities of being introspective while also facilitating dialogue with others. Introspective reflective inquiry is cultivated by requiring students to reflect on their own clinical experiences to identify a critical incident from practice. Dialogue with others was then fostered by inviting students to post a brief summary of their reflective account to their respective RCoI. These postings occurred within structured online forums (REP 6) using structured online posts (REP 7). Students were also invited to complete each post with a reflective inquiry i.e. a question that invited a response/comment/advice from their peers within the RCoIs. In this way, students became actively involved in sharing their own reflective experiences and in advising others; all within the confines of a small and supportive online reflective community of inquiry.

8. Direct instruction

Direct instruction, is the third and final element of teaching presence. It relates to academic and pedagogic leadership, which provides disciplinary focus and opportunities for students to assume responsibility for their learning (Garrison and Vaughan, 2008). The BRIEF develops this element of the CoI process by identifying a further four

recommendations for educators that are aimed specifically at enabling students to gain greater autonomy and control over their reflective learning experiences. REP 9 and REP 10 foster cognitive presence by focusing on assessment and the role of the content expert while REP 11 and REP 12 foster social presence by promoting online participation and feedback from peers.

8.1. REP 9- align formative and summative assessments

Gikandi et al. (2011), who conducted a literature review on online formative assessment in higher education noted that the emphasis continues to be placed on summative assessment (assessment for validation/accreditation) whereas formative assessment (assessment to support learning) receives little attention. This is despite the potentially pivotal role that formative assessment can play in the teaching/learning transaction particularly when it is closely aligned with summative assessment (Gikandi et al., 2011). REP 9 therefore proposes the use of formative online assessments which incrementally builds towards the summative assessment. Each discussion forum takes the form of a formative online assessment which enables students to reflect on their specific critical incident using a specific type of reflective writing i.e. technical (forum 1), reflective (forum 2), dialogic (forum 3) and critical (forum 4) (see REP6). The application of formative assessment in this way enables the provision of effective and timely online feedback to students from both the moderator and peers within the small RCoIs. Similarly, the summative assessment takes the form of an extended written reflection on a critical incident from clinical practice. Therefore, students can use the feedback that they received in the online discussion forums to inform the completion of their reflective summative assessment. The close alignment and inter-relationship between both the formative and summative assessments is a pivotal factor in facilitating student reflection as students are supported to develop their reflective capacity in an incremental manner over time.

8.2. REP 10- use a subject matter expert as e-moderator

REP 10 proposes that the lecturer who delivers the face-to-face content or a lecturer with expertise in reflective practice should also moderate the online RCoIs. Developing a strong sense of social presence within the RCoIs creates a climate of trust which is fundamental to enabling students to share their reflective experiences, particularly within an online environment. Therefore, the lecturer who is seen as the content expert is preferable to an online facilitator, as they are better positioned to guide student reflection while simultaneously developing online social interaction. While there are divergent views concerning the process of e-moderation (Salmon, 2011), the use of a subject matter expert as e-moderator is consistent with the approach advocated by Anderson et al. (2001). Furthermore, the use of a subject matter expert as an e-moderator is particularly valuable when endeavouring to develop reflective capacity. While students value the input of their peers within the RCoIs it is the consistent presence of the e-moderator (lecturer/subject matter expert) that guides the development of their reflective writing and their understanding of the reflective practice process overtime (Authors name XXXX).

8.3. REP 11- promote online participation

Promoting online participation is a key consideration for the educator. A participation guide can be iteratively designed to assess both the quantity and quality of the students' online activity. The guide should clearly identify the specific number of posts that a student is required to submit and respond to within each discussion forum (quantity) while also outlining the requirements for each type of reflective writing (quality).The guide can be shared with students in advance of each discussion forum and should be specifically designed to function as an instructional guide to communicate expectations, while

also acting as an assessment tool to evaluate the level of student participation and the quality of their online reflective work. It is important to note that the students particularly value having access to a participation guide in advance of each discussion forum, as they can use it as a self-assessment tool when developing their online reflective posts.

8.4. REP 12- encourage peer-to-peer feedback

Peer feedback, commonly used F2F, also provides benefits when utilised within an online environment (Pritchard and Morrow, 2017). Peer feedback can be used to support the e-moderator in his/her role and REP 12 advocates the use of an informal peer-to-peer feedback system. This step is closely aligned with REP 8 which promotes the creation of an ethos of reflective inquiry; students are required to complete each online post with a question (i.e. a reflective inquiry) that invites a response/comment/advice from their peers. This reflective inquiry acts as a trigger for the informal peer-to-peer feedback process; students become actively involved in responding to these reflective inquiries thereby becoming involved in reflective thinking, debate and social interaction. A further advantage is that it encourages students to ask questions within the RCoIs, that they may be reluctant to ask in a traditional classroom setting.

9. Evaluation

Generally, studies which examine the CoI framework do not include a measure of student learning and those that do include such measures, tend to view learning as uniformly operationalized as self-reports elicited through surveys (Rourke and Kanuka, 2009). Therefore, it was imperative to integrate a process into the BRIEF which would encourage educators to consider evaluating the reflective learning experience that they had designed and implemented. The approach used is based on the work of the educationalist Hitchcock and Hughes (1995), who suggest that a researcher's ontological assumptions give rise to epistemological assumptions, which, have methodological implications for the choice of particular data collection techniques. Educators who use the BRIEF are therefore encouraged to investigate their teaching and learning experiences in a reflective and innovative manner. The approach is also sufficiently broad so as to cater for qualitative, quantitative or mixed methods approaches with a focus on generating practical recommendations for practice. A framework that includes an evaluation strategy is particularly significant as it may prompt educators to conduct studies that contribute to the research base for reflective educators in higher education.

An evaluation strategy is also helpful in determining the limitations of the framework. From a students perspective developing trust, coping with technical issues and developing computer literacy are all variables that impact the efficacy of the BRIEF. Students also require sufficient time and support to adapt to learning, communicating and reflecting in a blended environment. Furthermore, from an educators perspective utilising this framework requires additional professional development, additional time and a reimagining of the role of the educator. While the limitations of the BRIEF will vary depending on the context, the inbuilt evaluation strategy provides an opportunity to identify such limitations and plan a way forward.

10. Conclusion

The purpose of this paper was to demonstrate how the Blended Reflective Inquiry Educators Framework could be used to develop student's reflective capacity and reflective writing. The paper articulates the paradoxical position of reflective practice in higher education while also providing an example of a framework that can be used to support educators to develop student's reflective abilities. Teaching presence and its three dimensions (design and organisation; facilitation and direct instruction) act as the pedagogical engine that drives the

BRIEF, with cognitive and social presence being addressed concurrently as the educational programme unfolds. A series of 12 prompts are provided which invite the educator to engage in reflective educational practice while an evaluation strategy encourages educators to conduct research into their teaching and learning experiences. While the BRIEF was developed within the context of nurse education, an investigation of the frameworks applicability within the wider professional and higher education contexts would be welcomed.

Conflicts of interest

The author has declared that they do not have a conflict of interest.

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Ethical approval

Ethical approval for the study was obtained from the University College Dublin Human Research Ethics Committee.

Appendix A. Supplementary data

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