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Evidencing Enquiry Based Learning: An Innovative Approach to Educating Children and Young People's Nursing Students

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ABSTRACT

This discussion paper gives an overview of an innovative online distance learning pre-registration BSc (Hons) Children and Young People's nursing program underpinned by Enquiry-Based Learning pedagogy. Whilst the program is delivered to all four fields of practice (Adult, Children and Young People, Learning Disability, and Mental Health), in all four nations of the UK (England, Scotland, Wales, and Northern Ireland), the focus here is Children and Young People's nursing. Nurse education programs are delivered in accordance with the Standards for Nurse Education developed by the professional nursing body in the UK. This online distance learning curriculum uses a life-course perspective for all fields of nursing. Students develop the general knowledge and skills to care for all people across the life course but as the program progresses, they learn how to care for people within their own field of practice in greater depth. The educational context of the Children and Young People's nursing program highlights that the use of Enquiry-Based Learning can help address some of the challenges faced by Children and Young People's nursing students. A critical evaluation of Enquiry-Based Learning and its use within the curriculum concludes that Enquiry-Based Learning provides Children and Young People's nursing students with the graduate attributes of being able to communicate with infants, children, young people, and their families, adopt critical thinking to clinical settings and have an ability to find, generate, or synthesize their own knowledge in order to lead and manage evidence-based quality care for infants, children, young people, and their families in a variety of care settings and within interprofessional teams.

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Introduction

This paper discusses an innovative Children and Young People's (CYP) BSc Nursing Honours degree program designed for those already employed within a healthcare setting and who wish to pursue a career as a registered CYP nurse. The program is delivered in partnership with health and social care providers at the largest provider of online distance education within Europe. The student's individual employer funds their learning (via various funding routes) and provides practice learning experiences in accordance with the Nursing and Midwifery Council (NMC) Future Nurse Standards (Nursing and Midwifery Council [NMC], 2018a, 2018b). The program

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was approved by the NMC in 2020. This UK-wide program is unique in that the theory is delivered using an online distance learning approach in all four UK nations, (England, Scotland, Wales, Northern Ireland). Practice learning takes place within the geographical location of the individual student's employment base. The program is underpinned by an Enquiry-Based Learning (EBL) pedagogy to facilitate learning across theory and practice. Taking a four-field approach CYP students are afforded opportunity to learn across the life course with application to their own field of practice. The underpinning EBL pedagogy enhances student learning and optimizes student autonomy in their knowledge development and application to practice (Stockdale et al., 2019), not just for CYP students but for all fields of practice (Adult, Children and Young People, Learning Disability, Mental Health) across this UK-wide pre-registration program.

This paper will provide a discussion on the key challenges facing healthcare delivery and CYP nurse education in the UK and how the pre-registration CYP program has been developed to meet these challenges. Furthermore, this paper explores the pedagogy of EBL as a framework to facilitate student learning within a distance learning environment and argues that the use of EBL in this curriculum prepares CYP nurses with the knowledge, skills, and values required for contemporary CYP healthcare practice.

Healthcare provision for Children and Young People

In the UK today, it is acknowledged that infants, children, and young people have health and social care needs distinct from adults that dates as far back as 1741 when Thomas Coram developed the UK's first "foundling hospital" to support abandoned children. By 1769, George Armstrong opened the first dispensary to care for sick children, now generally regarded as a forerunner to current ambulatory care provision (Clarke, 2017). Shortly afterward in 1852, the first sick children's hospital was opened in the UK, this being Great Ormond Street Hospital in London, (Clarke, 2017). Following this, many more children's hospitals were set up across the UK. Today these hospitals continue to provide secondary and tertiary care for neonates, infants, children, young people (up to 18 years of age), and their families (Glasper & Richardson, 2021). CYP nurses continue to provide care in both the hospital and community setting (A. Glasper & Clarke, 2021). Furthermore, CYP nurses are uniquely placed to deliver care that recognizes the distinct stages of development and can care for neonates, infants, children, and young peoples' physical, psychological, emotional, and social needs and those of their families (E. A. Glasper, 2016). E. A. Glasper (2016) further argues that CYP nurses are crucial to care delivery for CYP, particularly during periods of acute illness, due to the specific knowledge and skills they acquire during pre-registration education.

Health and social care in the UK

Nurse education is inextricably linked to Higher Education Institutes (HEI) who provide nurse education programs in the UK (The Nuffield Trust, 2021). HEIs therefore have a remit to prepare student nurses to deliver care and apply best evidence within complex health and social care systems and within a context where funding for health and social care in the UK remains contentious and challenging. Indeed, the devolved national governments of the UK (i.e., Scotland, Wales, and Northern Ireland), have competing political priorities

(Feeley, 2021; The Kings Fund, 2015). Within this context, there are rising numbers of the population who experience mental health challenges across all ages, compounded by the COVID pandemic and there is evidence that referrals for CYP with Mental Health challenges and eating disorders have increased dramatically throughout this time (Davidson et al., 2021; Fuller et al., 2022; Glasper, A., Richardson, J., and Randall, D., 2021; Royal College of Paediatrics and Child Health [RCPCH], 2020; The Nuffield Trust, 2021; Children's Commissioner, 2021, 2022). The Royal College of Pediatrics and Child Health (RCPCH) (RCPCH, 2020). RCPCH (2020) have identified numerous factors that affect the health and well-being of CYP and examples include premature birth, congenital abnormalities, rising rates of childhood obesity, respiratory disease, accidents that affect both children and young people, and childhood cancers. Cancer is the leading cause of death in children 5–9 years of age (Royal College of Paediatrics and Child Health RCPCH, 2020). Finally, there are increasing numbers of CYP who require child protection or safeguarding due to abuse or neglect, which has been compounded more recently by the COVID-19 pandemic (RCPCH 2020; Romanou & Belton, 2020; Children's Commissioner's Office, 2022).

Challenges for Children and Young People's nursing in the U K

CYP's nursing in the UK faces similar challenges to those identified internationally, particularly high attrition rates from educational programs (Glasper, 2020b; Clarke, 2017; McKeever et al., 2018). CYP students cite various reasons for leaving their educational programs, namely, financial hardship, a lack of support from HEIs, and finally disappointment or a lack of understanding of what CYP nursing entails, which is highlighted during their practice-based experiences (Glasper, 2020a) advocates that educational programs need to be more flexible and student-centered to ensure CYP students complete their nursing programs and are adequately prepared to join the CYP nursing workforce. However, the predominant model for delivering CYP nursing programs in the UK continues to be campus-based, full-time university programs that arguably may not give the flexibility required (Glasper, 2020a).

Children and Young People's nursing in the UK

The most common pathway to becoming a CYP nurse in the UK is to complete an approved Nursing and Midwifery Council (NMC) nursing program. The UK is similar to countries in Europe, Australia, and China by having a single nursing regulator, compared to countries like America, Canada, and China, who adopt a state-by-state approach to nurse registration. The UK, along with Italy, Germany, and Eire, continues to be one of the few countries internationally to record nurses' specific field of practice on the nurse register and recognizes that CYP nurses require specific theoretical instruction and practice-based experiences within undergraduate nursing programs to prepare them to care for infants, children, and young people across a defined period of their life course, although how long this will be the case remains controversial (Glasper, 2020a; NMC 2018a; Clarke, 2017). The ICN (2021a) argues that nursing is a complex activity that defies concise definition that is recognized internationally. Clarke (2017) further argues this is equally true of CYP's nursing, whilst also advocating that it is helpful to contextualize CYP's nursing as applying

to the distinct part of a person's life course, from 0 to 18 years of age. Having an in-depth knowledge and understanding of CYP global developmental needs during this defined period is crucial to allow CYP nurses to meet their physiological, psychological, social, and emotional needs and support their families during this period. CYP nurses therefore need educational programs that are delivered in a flexible way that online distance learning using EBL can achieve (E. A. Glasper, 2016; Kahn & O'rourke, 200).

Innovative pedagogy – online distance learning

Flexibility in learning, teaching, and assessment, to satisfy highly diverse student needs, is fundamental, particularly for nursing students studying at a distance (Raymond et al., 2016; Glasper, 2020b). Postpandemic HEIs have embraced new ways of delivering nurse education to ensure student nurses are prepared for registration (NMC 2018; Kim 2020; S. Y. Kim et al., 2021). There are a number of terms associated with online educational delivery, including “open learning,” “blended learning,” “distance learning,” “e-learning,” “correspondence tuition,” and, most recently, “virtual learning” (Wihlborg & Friberg, 2016). Definitions may vary according to the combinations of pedagogies and technologies used (Friesen, 2012). There are recognized frameworks that promote engagement and retention in online learning (Smyth, 2013; Van Ameijde et al., 2016). The program with which this paper is concerned uses the ICEBERG framework. ICEBERG is a mnemonic that incorporates the pedagogy that online learning should adopt an Integrative, Collaborative, Engaging, Balanced, Economical, Reflective, and Gradual approach to help engage and retain students in online learning. Therefore, activities that encourage students to engage or “meet” and to discover more about their module lecturer and fellow students both personally and professionally will encourage online engagement and enhance the learning experience (Garrett & Cutting, 2012; Morley, 2012; Van Ameijde et al., 2016) in accordance with EBL.

Evidencing Enquiry-Based Learning

The theoretical background and rationale for EBL will now be considered (in this context, the noun enquiry is used but is interchangeable with “Inquiry”). The learning time is precious within professional education and EBL enables critically reflective exploration through the use of triggers that create an enhanced learning experience for the students, reinforcing the optimizing impact of the facilitative approach. All nursing students encompassing all fields of practice need to complete an extensive list of learning outcomes throughout their undergraduate nursing studies. This can often be experienced by students as a very pressurized and challenging time, particularly in the third and final stage. EBL sessions constitute an optimal opportunity to integrate new and creative pedagogies that are flexible, adaptable, student centered, and student led (Goodall, 2017). Theoretical underpinning reflects the philosophical contribution of Dewey (1938), which emphasized the significance of igniting student imagination and exploration within learning, but it is also appropriate to refer to the Socratic approach of using questions as the ignition to learning dialogs (Lam, 2011). EBL is, therefore, an appropriate response to a pedagogical need for transformative, memorable, and thus, impactful undergraduate education. The didactic delivery of propositional knowledge is perhaps too easy and expedient for an experienced

educator. Traditional didactic delivery can also lack impact through limited uptake and absorption over time (Goodall, 2017; Lincoln, 2019).

Kahn and O’rourke (2005) described EBL as a “broad umbrella term,” an interesting and appropriate metaphor, referring to approaches to learning driven by ongoing critical intellectual curiosity that builds over time. The EBL approach is concordant with respect for the nature of the learning environment within higher education, respecting the distinct skills, expectations, and learning styles that adults may bring to any learning situation; as described in Social Learning Theory (Bandura, 1977). The “teacher” transforms into facilitator in this context, employing a range of “triggers” to initiate tasks or foci; thereafter enabling the students to take the lead in driving the direction of the EBL sessions (Kahn & O’rourke, 2005; Whowell, 2006).

The explicit democratic intention within student led learning sits at the heart of the philosophical positioning of EBL, inviting every student to work effectively together, including forming smaller subgroups (5–6 students) to take on specific group-delegated activities (Goodall, 2017). This usually leads to the whole group achieving more, as “tasks” are divided equitably within the group, with all students sharing the responsibility for the quantity and quality of the ensuing discussion and learning achieved, as well as finding evidence to substantiate their contributions to the collective group effort (Gough, 2008; W. Hutchings, 2006, 2007). Additionally, the professional importance of teamwork is also being subliminally reinforced in this context, thereby enabling students to make good use of generic transferable knowledge and skills in practice. Goleman (2006), in his book *Social Intelligence*, advocated that a key benchmark of professional practice would now be that professionals would effectively and enthusiastically work with others, thereby facilitating interprofessional collaborative working essential as health and social care become more interconnected and complex (Swinnen et al., 2021).

Kahn and O’rourke (2004) suggest that key aspects of EBL include open-ended group engagement with complex scenarios, solution-focused approaches, student-led enquiry leading to alternative approaches, whilst fully recognizing the powerful nature of experiential learning. Thus, students are encouraged to become self-aware of their own learning needs, whilst preparing for professional practice and ongoing development (NMC, 2018). EBL activities are usefully employed to ignite student curiosity encouraging active exploration. The primary responsibility for the learning rests with the student, to be intellectually curious, constructively critical, and explorative in intention. Active, experiential, practice-focused learning approaches are integral to both higher education and pre-registration nursing curricula, so the students are very familiar with the expectations of professional programs. The adaptable enabling and student led EBL approach invites students to be far more directive toward as well as participative in their learning. EBL sessions alongside clinical placements are an established element of the current curricula, so the students quickly acclimatize to this format (Smith & Kennedy, 2020; NMC, 2018).

Nursing students lean toward active and experiential learning styles, facilitated by practice-based learning. The success of EBL does though place an imperative upon the EBL facilitator to identify innovative solutions for learning about and alongside practice (Dewald, 2020; Dewey, 1938; Stewart et al., 2006). However, the EBL approach can make use of an almost limitless resource of “triggers” to ignite and substantiate ongoing establishment of stimulating and creative learning opportunities. These triggers can draw upon many aesthetic origins, including poetry, prose, photography, biography, documentaries, and

fictional film (Alexander et al., 2012; Goodall, 2017). In this context, EBL is intertwining with forms of entertainment or enchantment, creating triggers that engage and hold student interest effectively. Bettelheim (1991) and Warner (1994b) contributed seminal work with regard to the use of stories in both informal and formal education, delivering a body of expert opinion that demonstrates a conceptual transformation. This emphasis on the social and cultural significance of storytelling, as an impactful and memorable approach, underscores the detailed use of stories within EBL. So, in this context, the human desire to be entertained can be beneficially harnessed for educational purposes (Cairns et al., 2003). There are so many significant examples of information being presented in entertaining ways to better persuade participants within wider social and cultural landscapes both within and beyond educational intention (Warner, 1994a; Alexander et al., 2005).

Through incrementally refining effective ways of working with peers, students often evaluate the EBL sessions as reinforcing their capacity to learn more effectively from each other and engage in shared reflection; as they also learn to work with each other more reflexively (Gough, 2008; W. Hutchings, 2006, 2007). The openness of the approach can feel uncertain to some students who prefer a didactic approach (W. Hutchings, 2007). Recognizing the need to respond effectively to such concerns reinforces how important it is that experienced educators, well able to facilitate, are employed to encourage full student engagement with the sessions. The facilitation is subtle, judiciously employed, and should stimulate the learning rather than dominate it (Gough, 2008). Within EBL, this can be viewed as a form of student empowerment, which can reap multiple developmental benefits from embracing this approach to their learning (Kahn & O'rourke, 2004).

There is a distinct international evidence base, which advocates the synchronous positioning of storytelling alongside socialization, enabled within EBL. This can be harnessed for education impact, partnering student-led learning with narrative and aesthetic approaches. Within Higher Education, where meeting student expectations and engaging their sustained interest has never mattered more, this is clearly worthy of further exploration (Alexander et al., 2012; Goodall, 2017). The EBL sessions are an opportunity for the students to critically consider many of the learning outcomes in a synthesized and evaluative manner. Full awareness of the extent of the learning outcomes has been an influential factor in determining which triggers are selected to better enable focused consideration of those subjects. The EBL sessions have therefore now become an alternative scenario to enable the achievement and assessment of learning outcomes and skills annexes (Nursing and Midwifery Council [NMC], 2018a). The priority attached to these learning outcomes clearly influences some of the topic choices within the EBL sessions (Nursing and Midwifery Council [NMC], 2018b).

Students need to feel encouraged and motivated to recognize the importance and relevance of the EBL to their learning, whilst also being facilitated to be more reflexive and share their opinions within a supportive environment (Gough, 2008; W. Hutchings, 2006, 2007). Adult learners, especially when preparing to become health and social care professionals, need to be prepared to achieve and sustain independent learning (Coertzee et al., 2018; NMC 2018). This process facilitates the building up of both resilience and confidence, contributing toward the preparation of students for registration at the point of course completion (Goodall, 2017; NMC, 2018).

EBL within an online distance program

For over 30 years, the UK University delivering this program has supported open distance learning for Nursing, Health, and Social Care, now using this approach for the new CYP's field of practice. There is a blend of online synchronous face-to-face learning in tutorials or master classes with asynchronous online teaching and learning materials along with practice-based learning. This approach is supported in the literature as an effective way to learn that is also associated with high student satisfaction rates (Collins et al., 2017; Wilson & Hungerford, 2015).

This hybrid approach using the virtual learning environment (VLE) and EBL offers flexibility and is suited to students who expect to access the learning environment in ways that suit their lifestyles and learning preferences, as well as the needs of future employers (Vicary et al., 2018; Wilson & Hungerford, 2015).

Positive experiences of virtual learning prepare all student nurses to be digitally aware and competent in using digital systems, required for both online learning and within contemporary healthcare practice where digital technologies like telehealth are being used more extensively (Royal College of Nursing [RCN], 2021; The NHS Constitution, 2019; Wilson & Hungerford, 2015).

The use of technologies enables students to make connections, which in turn motivates them to persist and continue in their studies (Wilson & Hungerford, 2015). Technology within this online distance learning environment is increasingly being used to provide online seminars facilitated in real time to create a collaborative learning experience to promote active student engagement in learning (Duck & Stewart, 2021; McGarry et al., 2015; Wilson & Hungerford, 2015). Students learning in groups are afforded the opportunity to increase their understanding through asking questions of their peers and answering the queries of others in a reciprocal learning environment. Student nurses are encouraged to engage in the virtual classroom, an online meeting room platform where they have specific synchronous and asynchronous learning with the module Lecturer and CYP field-specific group. In EBL tutorials, the group size is 8–10 for stages 2 and 3 of the online distance program and these small group sizes enable the module lecturer to work closely with the CYP students and promote and support depth of learning (Collins et al., 2017). This approach also allows students to work closely with students from all four nations of the UK. Participating in learning in this way allows students to learn about policy and contemporary practice, not only in their own nation, but also the other nations of the UK, which facilitates learning of best practice. The shared VLE where the discussion is student-led and facilitated by the module lecturer is one such example. Learning in this way can promote leadership qualities by providing students with the opportunity to teach others and is strongly encouraged within this online distance program. This approach is well established with the robust VLE using web 2.0 technologies. Experienced nursing educators work with a range of key partners, who may include external health and social care partners, commissioners, service users and carers, external examiners, and learning technologists. Collaboration ensures authenticity and quality of the EBL materials, which go through many stages of critical review before use by students, thus, helping to ensure excellence (Campbell, 2019).

The online distance learning university also has experienced lecturers who, not only, draw on their clinical expertise in their teaching, but also are continually educated on the

pedagogy of distance blended learning, EBL and professional practice, and therefore fully understand the necessity for creating safe online relationships and environments that enhance student learning, in accordance with NMC requirements (Van Ameijde et al., 2016; Wilson & Hungerford, 2015; NMC 2018).

Whilst EBL has been identified as popular with the majority of nursing students, it is not the preferred approach for a small but significant minority. ¹Citing four challenges to the EBL approach, Kuykendall (2022) discussed considerations of student ability, resistance to nontraditional pedagogies, concern over equity of opportunity, and lack of preparedness, for example, in terms of trigger identification. These are all valid concerns and remind educators that not all students present with the same expectations, ability, confidence, or preferred learning style. The emphasis therefore needs to be on the educator to find innovative ways to draw all of the learners into the collective effort, with the stated learning outcomes in mind. The online distance university (The Open University, 2022) recently published a report with the National Health Executive (NHE) discussing how a minority of students (32%) were more reticent about EBL, a challenge now being responded to in terms of appreciating all learner expectations and motivations.

Throughout the Future Nurse curriculum, theory and practice are delivered at each stage in two 60 credit modules, one theory and one practice, for each academic level aligned to Academic Frameworks throughout the UK. The theory is delivered solely online but both theory and practice modules are supported by online tutorials. Practice-based learning takes place in real time in a range of practice learning environments. The use of EBL within the online tutorials affords CYP's nursing students' opportunity to engage in a mutually supportive learning environment allowing them to communicate, share, and co-construct new knowledge. EBL is facilitated by both experienced CYP lecturers and registrant practitioners in the practice setting (Laurillard, 2008). This moves students to be constructors of their own learning providing opportunity for them not only to develop new knowledge and understanding but also develop lifelong learning skills and leadership qualities as they negotiate with peers in the online learning environment (Crawford et al., 2013; Van Ameijde et al., 2016). Furthermore, this online learning environment allows students with declared disability the opportunity to revisit learning materials, which are also supported by online readers and audio assets (Alexander et al., 2012; Richardson, 2014; The Open University, 2020; Wilson & Hungerford, 2015).

The current UK NMC standards for nurse education require that CYP students are empowered and provided with appropriate and authentic learning opportunities (Nursing and Midwifery Council [NMC], 2018a; Smith & Kennedy, 2020). Furthermore, the complexities of the fast and rapidly changing healthcare landscape require that CYP, and indeed all Health and social students, are educated for knowledge creation, lifelong learning, and leadership. They need to be equipped to direct change, ask important questions, problem solve, and generate knowledge (Goodall, 2017). EBL provides an environment to facilitate and rehearse these skills in a supportive learning environment where learning is driven by a process of enquiry owned by the students (Dewey, 1938; Goodall, 2017; Whowell, 2006; Wilson & Hungerford, 2015).

EBL is a well-established pedagogical approach that compliments the ICEBERG framework, (Van Ameijde et al., 2016) whilst enabling the link between theory and practice (Ehrenberg & Häggblom, 2007; Grandis et al., 2003; Matt, 2000; Price, 2001). EBL promotes student-centered learning, enables autonomy in learning, motivates students to learn, whilst

also helping them to develop the graduate attributes required for lifelong learning required in nursing (B. Hutchings & O'rouke, 2003; Holtsander et al., 2012; Based on constructivist theory, EBL enables the student to develop knowledge and meaning through engagement, reflection, and analysis of experiences. It allows the student to co-construct knowledge, build on previous learning, and problem solve issues from practice (Matt, 2000; Price, 2003; Stacey et al., 2018).

EBL also nurtures the development of self-directed learning skills, encouraging students to be independent learners (Crawford et al., 2013; Pokorny & Pokorny, 2005). Additionally, it allows the space to revisit previous learning, consolidate understanding, and apply it to their practice context. Through the development of skills in critical and reflective thinking, students can then integrate theory into practice (Stacey et al., 2018; Ehrenberg and Häggblom, 2007 ; Crawford et al., 2013).

Successful EBL in an online distance learning environment

Implementation of EBL via tutorials adopts different models in stages 2 and 3 of the program, with unfolding scenarios in stage 2, and case studies in stage 3. The scenarios and case studies are mapped to the module and program learning outcomes. In stage 2, the first tutorial introduces the beginning of the unfolding scenario, students connect with prior knowledge from stage 1 and practice settings, gather background information and question what they need to learn. These triggers become their line of enquiry. Between tutorial sessions 1 and 2, students have 18 h self-directed learning time, during which they investigate their lines of enquiry, drawing on a range of evidence from theory, research, and practice to do so. In this construction phase, they prepare to share their new understandings with peers. In tutorial session 2, students come back together as a small group and share their learning with peers. Peers being other CYP students. Following this exploring phase, the lecturer offers more information from the scenario, gradually building up the complexity of care as students would see in practice. Students then develop further lines of enquiry, which at this stage are likely to be field specific. Between tutorial sessions 2 and 3, students again have 18 h of independent study time, within which they investigate further lines of enquiry, and again prepare to share their new understandings with their peers. In tutorial session 3, students reflect and share learning across the scenario, discussing as a group how this relates to practice. This cycle is then repeated for subsequent scenarios for learning within the module. The lecturer continuously monitors student engagement and learning as student to staff ratio is low and can intervene and support students who may find EBL challenging (Duck & Stewart, 2021). Collins et al. (2017) concurs that this promotion of active learning within small groups supports student learning.

In stage 3 of the program, a mix of case studies and biopsychosocial person-centered scenarios with trigger questions is used. The case studies support development of trigger questions, followed up through self-directed learning and peer-led enquiry. The biopsychosocial person-centered scenarios use a family group, each with a brief biopsychosocial person-centered history that is supported by a selection of predetermined trigger questions (pertaining to the learning outcomes being taught). In the later example, students bring their nursing experience to their peer-group learning to develop the possible unfolding situation(s) as related to CYP nursing practice. Both approaches draw on self-directed lines of enquiry through both peer-assisted and individual learning.

Students engage in these processes as active learners, thereby also developing their professional identity as CYP students whilst building relationships of trust across their group. Additionally, EBL enables students to develop confidence in learning and avoid the sense of isolation often reported by students who undertake online study (Wilson & Hungerford, 2015).

Promoting learning in this way has multiple benefits for CYP students. Notably, the students are proactive in their own learning. They co-create new knowledge, which is more readily retained because it has been acquired by experience (McGarry et al., 2011) whilst developing skills required to respond to complex care needs and the ever-changing health-care landscape where interprofessional collaborative working is essential to meet the needs of infants, children, young people, and their families (Clarke, 2017; Whiting et al., 2016).

Interprofessional collaborative working is addressed within each of the EBL scenarios whereby there are a range of health and social care professionals involved in the delivery of care of the children, young people, and their families. The EBL also takes a family-centred approach whilst allowing students to explore the concept of collaborative working, provides insight into the roles of a range of health and social care professionals, and requires that the students reflect on their interactions with other professionals. For example, in one of the scenarios a mother has an emergency cesarean section that involves discussions between midwives, fetal medicine professionals, medical, theater staff, and ITU staff. Another child within this family has swallowing difficulties that requires the involvement of a speech and language therapist. There is an accompanying audio recording within which the mother discusses her experiences of different interprofessional team members. The family-based scenarios also reflect the involvement of third-sector charities to support families who provide support to families, including, for example, the British Heart Foundation and the Down's Syndrome Association.

The CYP online distance learning program already addresses the recommendation by Glasper (2020a) that in order to address attrition in CYP nursing, flexible learning programs that are student-focused should be developed more widely (Davidson et al., 2021; The Open University, 2020). CYP students on this online distance learning nursing program are normally working within health and social care prior to commencing the program and remain as employees whilst on the program earning as they learn. Students are either part of commissioned numbers (Northern Ireland, Scotland, Wales) or funded by their employer (England). In England, the program is also delivered as an apprenticeship program. Therefore, the majority of students are earning a salary whilst studying and therefore might not experience the same level of financial hardship as other university students who study nursing in traditional HEI programs. The program can be studied over 3 years full time or part time over 4 years. The majority of students study over 4 years and therefore, when they are not on study leave or placements, they work within their employed healthcare role. Attrition rates at this online distance university remain low (Davidson et al., 2021; The Open University, 2020, 2022) and completion rates high, thereby suggesting that this flexible student-focused approach to learning helps to address attrition in accordance with Glasper's (2020a) views on CYP provision. CYP students are also able to draw upon their previous healthcare experience and have realistic expectations of what CYP nursing entails and therefore do not suffer from the "reality shock" in clinical placements that other university students experience, which may also contribute to low CYP attrition rates at the online distance university

(S. J. Kim, 2020; The Open University, 2020, 2022; OU/NHE, 2022). Glasper (2020a) also identified that many newly qualified nurses leave the profession shortly after registration creating challenges in care delivery and workforce planning. CYP students who have completed the online distance nursing program generally continue to work for the same employer after registration that also helps with workforce planning, particularly in hard-to-recruit areas such as remote and rural areas or specific fields of nursing or clinical subspecialty, (Davidson et al., 2021). Finally, students demonstrate strong motivation and commitment to undertake the online distance nursing program as they may have been denied opportunity to higher education previously, therefore, are well suited to the flexible online distance nursing program (Davidson et al., 2021; Draper et al., 2014).

Conclusion

There have always been limitations of what can be included in any undergraduate curriculum as knowledge is dynamic and changes as quickly as healthcare itself. Therefore, EBL equips students with the tools of how to construct and synthesize new knowledge that is necessary for future contemporary practice. Indeed, EBL provides CYP students with graduate skills required for communication with CYP and their families and enables critical thinking in clinical settings and facilitates the ability to find, generate, and synthesize knowledge in order to lead and manage evidence-based quality care for CYP and their families in a variety of care settings. Furthermore, the uniqueness of the EBL approach within the online space and a distance learning environment is that it allows flexibility in learning and can be accessed anywhere at any time. Infants, children, and young people are also more commonly cared for by interprofessional teams and this has also been emphasized in the program that allows students to learn the skills for interprofessional working in a safe environment. Therefore, EBL facilitates an across the life-course approach that embeds the specific skills and knowledge required of CYP registrant nurses.

The innovative application of EBL embedded in core theoretical learning within a UK-wide online distance learning CYP nursing program reflects how EBL develops and transforms contemporary nursing practice. The EBL facilitator can act as a co-creator of memorable and impactful learning with students who are being prepared for professional practice and therefore need to be encouraged to be active and engaged in all that they do.

This program is unique in the UK, delivered across all four nations and all four fields of nursing practice, and its use of an online distance learning approach with EBL pedagogy, prepares CYP nurses with the knowledge, leadership skills, and values required for contemporary CYP healthcare practice.

Note

1. The reviewer identified that the statement on page 11 line 16 needed simplified Please change Whilst EBL has been identified as popular with the majority of nursing students it is not the preferred approach for a small but significant minority to Whilst EBL has been identified as popular by the majority of nursing students there is a minority that do not prefer this way of learning

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References

- Alexander, M., Lenehan, P., & Pavlov, A. (2012). *Cinemeducation. Using film and other visual media in graduate and medical education* (Vol. 2). Radcliffe.
- Alexander, M., Pavlov, A., & Lenehan, P. (2005). *Cinemeducation: A comprehensive guide to using film in medical education* (Vol. 1). Radcliffe.
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Bettelheim, B. (1991). *The uses of enchantment. The meaning and importance of fairy tales*. Penguin.
- Cairns, J., Gardner, R., & Lawton, D. (Eds.). (2003). *Education for values: Morals, ethics and citizenship in contemporary teaching*. Routledge.
- Campbell, J. (2019). *Editor guidance for module teams*. The Open University.
- Children's Commissioner. (2021). The big answer, children's social care | children's commissioner for England (childrenscommissioner.gov.uk) Retrieved September 19, 2022, from.
- Children's Commissioner. (2022). Children's Mental Health Services 2020/21. The next steps to improving mental health support for children | Children's Commissioner for England (childrenscommissioner.gov.uk) Retrieved September 19, 2022, from.
- Children's Commissioner's Office. (2022). Online safety commission from government: Our recommendations for making the online world safer for children, 2022. Briefing to MPs on the Online Safety Bill | Children's Commissioner for England (childrenscommissioner.gov.uk) Retrieved September 19, 2022
- Clarke, S. (2017). The history of children's nursing and its direction within the United Kingdom. *Comprehensive Child and Adolescent Nursing*, 40(3), 200–2014. <https://doi.org/10.1080/24694193.2017.1316790>
- Coertzee, I. M., Heyns, T., Botma, Y., & van Rensburg, G. H. (2018). Collaborative learning: Key considerations for nurse educators. *Gender and Behaviour*, 16(3), 12111–12117.
- Collins, A., Broeseke, A., Cunningham, J., Cortes, C., Beall, J., Bigham, A., & Chang, J. (2017, March). A longitudinal online interprofessional education experience involving family nurse practitioner students and pharmacy students. *Journal of Interprofessional Care*, 31(2), 218–225. 8p. <https://doi.org/10.1080/13561820.2016.1255600>
- Crawford, J., Brudnoy, L., Soong, T., & Graham, T. (2013, October). Patient navigation in oncology nursing: An innovative blended learning model. *Journal of Continuing Education*, 144(10), 461–469. <https://doi.org/10.3928/00220124-20130903-88>
- Davidson, M. C. J., Malcolm, L., Sturley, L., Crowley, M., Mackinnon, F., & McInally, W. (2021). The future of nurse education? Studying at the Open University in Scotland. *The British Journal of Nursing*, 30(7), 428–432. <https://doi.org/10.12968/bjon.2021.30.7.428>
- Dewald, R. J. (2020). How would socrates enhance online learning in education? *Nurse Education Perspectives*, 41(4), 253–254. <https://doi.org/10.1097/01.NEP.0000000000000582>
- Dewey, J. (1938). *Experience & education*. Kappa Delta Pi.
- Draper, J., Beretta, R., Kenward, L., McDonagh, L., Messenger, J., & Rounce, J. (2014). Ready to hit the ground running': Alumni and employer accounts of a unique part-time distance learning pre-

- registration nurse education programme. *Nurse Education Today*, 34(10), 1305–1310. <https://doi.org/10.1016/j.nedt.2014.06.007>
- Duck, A., & Stewart, M. (2021). A pedagogical redesign for online pathophysiology. *Teaching & Learning in Nursing*, 16(4), 362–364. <https://doi.org/10.1016/j.teln.2021.04.005>
- Ehrenberg, A. C., & Häggblom, M. (2007). Problem-based learning in clinical nursing education: Integrating theory and practice. *Nurse Education in Practice*, 7(2), 67–74. <https://doi.org/10.1016/j.nepr.2006.04.005>
- Feeley, D., (2021). Adult social care: Independent review. Scottish Government. Edinburgh. Retrieved September 14, 2021, from <https://www.gov.scot/publications/independent-review-adult-social-care-scotland/pages/0/>
- Friesen, N. (2012). *Report: Defining blended learning*. Microsoft Word - Blended Learning Complete. Doc (normfriesen.info). Retrieved September 23, 2022.
- Fuller, S. J., Thomson, S., & Tan, J. (2022). Nasogastric tube feeding under restraint: Practical guidance for children’s nurses. *Nursing Children and Young People*, e1457. <https://doi.org/10.7748/ncyp.2022.e1457>
- Garrett, B., & Cutting, R. (2012). Using social media to promote international student partnerships. *Nurse Education in Practice*, 12(6), 340–345. <https://doi.org/10.1016/j.nepr.2012.04.003>
- Gasper, E. A. (2016). Supporting the profession of Children’s and Young People’s nursing through scholarly application. *Comprehensive Child and Adolescent Nursing*, 39(2), 81–83. <https://doi.org/10.1080/24694193.2016.1184052>
- Gasper, E. A. (2020a). Celebrating a century of state regulation of Children’s and Young People’s Nurses in the UK (1919–2019). *Comprehensive Child and Adolescent Nursing*, 43(1), 1–9. <https://doi.org/10.1080/24694193.2019.1707594>
- Gasper, E. A. (2020b). Will the return of financial support for students improve nurse recruitment? *The British Journal of Nursing*, 29(3), 172–173. <https://doi.org/10.12968/bjon.2020.29.3.172>
- Gasper, A., & Clarke, S. (2021). Historical perspectives on children’s nursing. In A. Gasper, J. Richardson, & D. Randell (Eds.), *A textbook of children’s and Young People’s Nursing* (3rd ed., pp. 1–19). Elsevier.
- Goleman, D. (2006). *Social Intelligence: The new science of social relationships*. Bantam Books.
- Goodall, N. (2017). *Exploring the use of fictional film as a trigger to EBL*. Open University Research Archive.
- Gough, G. (2008). *Encouraging groups to take responsibility for learning. First steps in EBL*. International Symposium in Engineering Education. Loughborough
- Grandis, S., Long, G., Gasper, E. A., & Jackson, P. (2003). *Foundation studies for nursing: Using Enquiry-Based Learning*. Palgrave Macmillan.
- Holtsander, L. F., Racine, L., Furniss, S., Burles, M., & Turner, H. (2012, June). Developing and piloting an online graduate nursing course focused on experiential learning of qualitative research methods. *The Journal of Nursing Education*, 51(6), 345–348. <https://doi.org/10.3928/01484834-20120427-03>
- Hutchings, W. (2006). *Bringing research and teaching together*. Centre for Excellence in Enquiry Based Learning.
- Hutchings, W. (2007). *The philosophical bases of Enquiry Based Learning*. Centre for Excellence in Enquiry Based Learning.
- Hutchings, B., & O’Rourke, K. (2003). *Problem-based learning: Evidencing and evaluating the student experience*. The Higher Education Academy London.
- International council of Nurses (ICN). (2021a). *Nursing Definitions*. Retrieved September 19, 2022, September <https://www.icn.ch/nursing-policy/nursing-definitions>
- Kahn, P., & O’Rourke, K. (2004). *Guide to curriculum design: Enquiry Based Learning*. HEA. Ceebl. manchester.ac.uk Retrieved January 28, 2017.
- Kahn, P., & O’Rourke, K. (2005). Understanding Enquiry Based Learning. In T. Barrett, I. MacLabhrainn, & H. Fallon (Eds.), *Handbook of Enquiry & Problem Based Learning* (pp. 5–6). CELT.

- Kim, S. J. (2020). Relationships between reality shock, professional self concept, and nursing students' perceived trust from nursing educators. A Cross sectional study. *Nurse Education Today*, 88, 104369.
- Kim, S. J. (2020). Relationships between reality shock, professional self-concept, and nursing students' perceived trust from nursing educators: A cross sectional study. *Nurse Education Today*, 88(2020), 104369. <https://doi.org/10.1016/j.nedt.2020.104369>
- Kim, S. Y., Kim, S. J., & Lee, S. H. (2021). Effects of online learning on nursing students in South Korea during COVID-19. *International Journal of Environmental Research and Public Health*, 18(16), 8506. <https://doi.org/10.3390/ijerph18168506>
- The Kings Fund. (2015). The Kings Fund. *Devolution: what it means for health and social care in England*. (Retrieved September 19, 2022, from https://www.kingsfund.org.uk/sites/default/files/field/publication_file/devolution-briefing-nov15.pdf)
- Kuykendall, M., (2022). 4 Common obstacles to implementing inquiry based learning and how to overcome them. Retrieved December 16, 2022, from <https://www.edutopia.org/article/4-common-obstacles-implementing-inquiry-based-learning-and-how-overcome-them>
- Lam, F. (2011). *The Socratic method as an approach to learning and its benefits*. Carnegie Mellon University.
- Laurillard, D. (2008). The teacher as action researcher: Using technology to capture pedagogic form. *Studies in Higher Education*, 33(2), 139–154. <https://doi.org/10.1080/03075070801915908>
- Lincoln, A., (2019). Can a blended learning environment enhance teaching and learning in large heterogeneous first-year classes? A study in a private higher education institution Doctor of Education date: 2019 Awarding institution: Queen's University Belfast
- Matt, P. (2000). Does constructivist epistemology have a place in nurse education? *The Journal of Nursing Education*, 39(4), 166–170. <https://doi.org/10.3928/0148-4834-20000401-07>
- McGarry, J. B., Aubeeluck, A., James, V., & Hinsliff-Smith, K. (2011). Maximising graduate status in pre-registration nursing programmes: Utilising problem-based learning. *Nurse Education in Practice*, 11(6), 342–344. <https://doi.org/10.1016/j.nepr.2010.11.018>
- McGarry, J. B., Theobald, K., Lewis, P. A., & Coyer, F. (2015). Flexible learning design in curriculum delivery promotes student engagement and develop metacognitive learners: An integrative review. *Nurse Education Today*, 35(9), 966–973. <https://doi.org/10.1016/j.nedt.2015.06.009>
- McKeever, S., Whiting, L., Anderson, D., & Twycross, A. (2018). Causes of attrition in children's nursing (CATCHING): An exploratory mixed method study. *Nurse Education in Practice*, 32(2018), 44–51. <https://doi.org/10.1016/j.nepr.2018.06.012>
- Morley, D. (2012). Enhancing networking and proactive learning skills in the first-year university experience through the use of wikis. *Nurse Education Today*, 32(3), 261–266. <https://doi.org/10.1016/j.nedt.2011.03.007>
- The NHS Constitution. (2019). *The Topol review: Preparing the healthcare workforce to deliver the digital future. An independent report on behalf of the secretary of state for health and social care*. Health Education England.
- NMC. (2018). The code: Professional standards of practice and behaviour for nurses and midwives. Nursing and Midwifery Council. Retrieved September 26, 2022, from <https://www.nmc.org.uk/standards/code/>
- The Nuffield Trust. (2021). Health and social care explained. (Retrieved September 19, 2022) <https://www.nuffieldtrust.org.uk/health-and-social-care-explained>
- Nursing and Midwifery Council (NMC). (2018a). Future nurse: Standards of proficiency for registered nurses. (Retrieved September 19, 2022, from <https://www.nmc.org.uk/globalassets/sitedocuments/standards-of-proficiency/nurses/future-nurse-proficiencies.pdf>)
- Nursing and Midwifery Council (NMC). (2018b). Realising professionalism: Standards for education and training. Part 3: Standards for pre-registration nursing programmes [online]. Nursing and Midwifery Council. Retrieved September 26, 2022, from <https://www.nmc.org.uk/standards/standards-for-nurses/standards-for-pre-registration-nursing-programmes/>
- The Open University. (2020). Bsc (Honours) nursing. Retrieved September 19, 2022, from <http://www.open.ac.uk/courses/nursing-healthcare/degrees/bsc-nursing-r39>

- The Open University. (2022). *Workbased learning statistics*. The Open University.
- The Open University and The National Health Executive (NHE). (2022). *Enquiry based learning: Transforming nurse education*. The Open University.
- Pokorny, M., & Pokorny, H. (2005). Widening participation in higher education: Student quantitative skills and independent learning as impediments to progression international. *Journal of Mathematical Education in Science and Technology*, 36(5), 445–446. <https://doi.org/10.1080/00207390500062621>
- Price, B. (2001). Enquiry-based learning: An introductory guide. *Nursing Standard*, 12(15), 45–52. <https://doi.org/10.7748/ns2001.09.15.52.45.c3083>
- Price, B. (2003). *Studying nursing using problem-based and Enquiry-Based Learning*. Palgrave Macmillan.
- Raymond, A., Jacob, E., Jacob, D., & Lyons, J. (2016). Peer learning a pedagogical approach to enhance online learning: A qualitative exploration. *Nurse Education Today*, 44, 165–169. <https://doi.org/10.1016/j.nedt.2016.05.016>
- Richardson, J. T. E. (2014). Academic attainment of students with disabilities in distance education. *Post-Secondary Education and Disability*, 27(3), 291–303.
- Romanou, E., & Belton, E. (2020). *Isolated and struggling: Social isolation and the risk of child maltreatment, in lockdown and beyond*. NSPCC.
- Royal College of Nursing (RCN). (2021). *eHealth*. Retrieved September 19, 2022, from <https://www.rcn.org.uk/clinical-topics/ehealth>
- Royal College of Paediatrics and Child Health (RCPCH). (2020). State of child health. (Retrieved September 19, 2022 from <https://stateofchildhealth.rcpch.ac.uk/>
- Smith, S. B., & Kennedy, S. (2020). Authentic teaching to promote active learning: Redesign of an online RN to BSN evidence-based practice nursing course. *Journal of Professional Nursing [J Prof Nurs] Apr [J Prof Nurs] Apr*, 36(2), 56–61. <https://doi.org/10.1016/j.profnurs.2019.07.005>
- Smyth, K. (2013). Sharing and shaping effective institutional practice in TEL through the 3E Framework. In S. Greener (Ed.), *Case studies in e-learning* (pp. 141–159). Academic Publishing International.
- Stacey, G., Wilson, C., Reddy, H., Palmer, C., Henderson, J., Little, H., & Bull, H. (2018). Diagnosing and treating Enquiry Based Learning fatigue in graduate entry nursing students. *Nurse Education in Practice*, 28, 310–313. <https://doi.org/10.1016/j.nepr.2017.09.006>
- Stewart, S., Chappy, S., Zachman, P., & Pope, D. (2006). Evaluation of a nursing program that supports active learning accelerated online bachelor's to BSN program. *Studies in Health Technology and Informatics*, 122, 816.
- Stockdale, J., Hughes, C., Stronge, S., & Birch, M. (2019, March). Motivating midwifery students to digitalise their enquiry-based learning experiences: An evaluative case study. *Studies in Educational Evaluation*, 60, 59–65. <https://doi.org/10.1016/j.stueduc.2018.11.006>
- Swinnen, E., Fobelets, M., Adriaenssens, N., Moortgat, G., & Goelen, E. (2021). Effectiveness of an interprofessional education model to influence students' perceptions on interdisciplinary work. *The Journal of Nursing Education*, 60(9), 494–499. <https://doi.org/10.3928/01484834-20210708-02>
- Van Ameijde, J., Weller, M., & Cross, M. (2016). *Designing for Student Retention. The ICEBERG model and key design tips*. The Open University.
- Vicary, S., Copperman, J., & Higgs, A. (2018). Social work education through distance learning: The challenges and opportunities. *Social Work Education*, 37(6), 685–690. <https://doi.org/10.1080/02615479.2018.1495050>
- Warner, M. (1994a). *From beast to the Blonde. On fairytales and their tellers*. Chatto and Windus.
- Warner, M. (1994b). *Managing monsters: Six myths of our time: The 1994 Reith Lectures*. Vintage.
- Whiting, L., Caldwell, C., & Akers, E. (2016). An examination of interprofessional education in a children's re registration nursing course. *Nursing Children and Young People*, 28(6), 22–27. <https://doi.org/10.7748/ncyp.2016.e747>
- Whowell, M. (2006). A student guide to Enquiry Based Learning. Retrieved September 19, 2022 from www.ceebl.manchester.ac.uk/resource/guide/studentguide_july06.pdf

- Wihlborg, M., & Friberg, E. (2016). Framework for a virtual nursing faculty and student learning collaboration between universities in Sweden and the United States: A theoretical paper. *Nurse Education Today*, 41, 50–53. <https://doi.org/10.1016/j.nedt.2016.03.012>
- Wilson, R., & Hungerford, C. (2015, May). Mental health education and virtual learning environments (VLEs) in pre-registration nursing degrees: Follow the leaders? *Issues in Mental Health Nursing*, 36(5), 379–387. <https://doi.org/10.3109/01612840.2014.1002647>