

# A Model for Using Reflection to Enhance Interprofessional Education

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#### **Abstract**

Both Reflective Practice and Interprofessional Education (IPE) have gained a considerable attention in the past three decades. Although a plethora of literature exists on either topic, few articles address the issue of using reflective techniques to enhance IPE (King &Ross, 2003; Ross *et al*, 2005; Goosey & Barr, 2002; Craddock, O'Halloran, Borthwick, & McPherson, 2006) and fewer provide a model to achieve this.

The aim of this article is to propose a simple model for employing reflection in the context of healthcare education to enhance the outcomes of shared learning occasions. This model encourages a "reflective dialogue" (Shon, 1987) between two components of self (I and Me) on "self" and on "self and others" from a symbolic interactionism's view (Blumer, 1996).

This model is based the findings of the corresponding author's PhD project on "the teaching and learning reflective practice in medicine, nursing and physiotherapy" (Zarezadeh, 2009). Using symbolic interactionism as an interpretivist theoretical perspective, this study adopted a grounded theory methodology (Glaser & Strauss, 1967). A hermeneutic approach (Gadamer, 1975; Van Manen, 1990) informed both the theoretical perspective and the methodology of this study. Semi-structured interviews with students and teachers, non-participant observations and student's reflective assignments and diaries were the main methods of data collection.

In addition to the findings of the above PhD project this model is based on the literature of reflection and IPE particularly considering the aims of IPE such as improving services (Wilcock & Headrick, 2000), reducing "failure in trust and communication between professions," and modifying "negative attitudes and perceptions" (Carpenter, 1995).

The model offers a structure for reflection in three personal, professional, and interprofessional levels, considering the organisational context and the culture of patient –centeredness. In each level a set of questions guide the reflections in such a way that insights gained in different levels relate to and inform each other. The outcome of reflection using this structure is awareness about "self," roles and responsibilities, the meanings of these concepts for self, and emotions evoked in the personal level. This awareness is achieved in the professional level when an individual reflects on assumptions, identity, role, and importance of his/her profession. Finally, guided reflections on issues such as the role and importance of other professions, opportunities of learning with and from them, and their importance generate a higher level of awareness that encompasses the broader context of patient care.

Keywords: Interprofessional Education, Reflective Practice, Reflective Learning, Model



#### 1. Introduction

Both reflective practice and interprofessional education have gained a considerable attention in health and social care within the past three decades in the UK and worldwide. The overabundance of literature, enormous and ongoing research papers, together with apparently universal investment of time, effort and resources on various methods and models for implementing both reflective learning and interprofessional education in educational settings suggest that they have been considered more than just another educational fashion (Finch, 2000; Craddock, O'Halloran, Borthwick, & McPherson, 2006) by most academics and educationalists. On the contrary, both movements have showed to have potential educational values leading to a better practice and improving health outcomes (Gilbert Camp, Cole, & Bruce 2000; Almas, 2000).

Reflective learning and interprofessional education are two concepts deeply grounded in adult learning theory and both are strongly influenced by the works of Boud (1985, 1988); Kolb (1975, 1984) and, Schon (1983, 1987, and 1991). Reflection as defined by Boud, Keogh, & Walker (1985) as "those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations" (p.19). Therefore, any experience including an IPE situation can be the focus of reflective thinking. Reflection is mostly perceived as individual and is inclined to be utilised within uniprofessional structures (Karban & Smith, 2006 ) whereas, "interprofessional learning involves co-reflection like a double mirror held up by another to see aspects of oneself that one can not see directly in single mirror" (Wee, 1997 as cited in Barr, 2002).

Although a plethora of literature exists on both topics, few papers address the issue of using reflection to enhance interprofessional learning and fewer provide a model to achieve this in a practical way. For instance, Karban and Smith (2006), despite expressing their concerns about using a model of critical and reflective practice in interprofessional education argued that a model of critical and reflective practice within an interprofessional learning programme would offer an opportunity for professionals to develop a shared understanding of the world. They introduced a model based on a range of multiprofessional workshops supported by small multiprofessional groups of students during the academic year to provide opportunities for student to reflect. Ross, King, &Firth (2005) devised, piloted, and developed a reflective exercise to help professionals examine complex interprofessional relationship in health and social care. They used arrow- shaped cards displayed on large visual layouts as a reflective technique to provide a description of the relationships. They argue using this technique would enable professionals to explore the meaning of professional identity and consider intentions and actions within complex multidisciplinary situations. Both above models possess potential strengths such as considering the importance of obtaining shared understanding of the social world in the former and the meaning of professional identity in the latter. They have hardly provided a more comprehensive cover for most critical aspects of an IPE such as the role of emotions self -awareness, and portraying self and profession in relation to other professions. Finally, they have not considered the importance of the appreciation of the unique role and importance of self and others. These aspects have been considered in this model.



Craddock, O'Halloran, Borthwick, & McPherson, (2006) critically reviewed IPE in health and social care in the UK. They noted that reflective practitioner theory had been used to underpin the IPE initiatives in some universities. They observed that guiding teams to reflect in an IPE contact would help professionals to gain an appreciation of the role and underpinning views and models of both their own profession and those of others. These aspects of IPE have received explicit attention in our model.

Reflective learning has a potentially fundamental role to play in actualisation of some of interprofessional education's aims such as to overcome ignorance and prejudice amongst professions (Barr, 2002), to modify negative attitudes and, perceptions and to remedy failure in trust and communication between professions (Carpenter, 1995).

These can be potentially achieved by a structured "reflective dialogue" (Schon, 1987), between components of "self" about "self" and "others" (Blumer 1996). The outcome of such internal dialogue is raise in awareness about self and an appreciation of "others." This awareness and appreciation is prone to ongoing modification and change through a process of obtaining new insights and ideas.

This paper aims to introduce a model for using a structured reflective dialogue that enables professionals and students to become more aware about identity, role, importance, boundaries, and limitations of themselves as professionals and others in the personal, professional, and interprofessional levels. The increased awareness about these concepts is important because in an IPE occurs people are supposed to learn with, from and about each other (CAIPE, 2002). They are expected to work with each other therefore they should be aware of their own and others' professional boundaries, roles and limitations ((Torkington, Lymbery, Milward, Mufin, & Richell, 2004). What we think about certain concepts such as role and importance of others and our own profession in patient care, professional boundaries, and limitations can become the focus of a structured reflection, guided by a set of questions. Dewey (1933) advocated using reflection in different educational situations defined it as: active persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends (p.118). This active persistent and careful consideration of abovementioned concepts in the light of the aims of IPE is what this model tries to achieve. Moon (1999a, 1999 2001) advocated using questions that are likely to be helpful in promoting deep reflection in students.

# 2. Interprofessional Education

The movement of inter-professional education emerged out of the fact that "working together and learning to work together" in the health care delivery system were not easy and straightforward. This has been attributed to certain factors such as misunderstandings, negative stereotypes, role overlap, and failure in trust and communication (Higgins, Oldman, & Hunter, 1994; King ,Ross, Firth, & Arevalo 1999). Therefore, the high quality collaborative patient care that policy makers strived for did not seem to be fully achieved in such work environments. In response to this, a number of initiatives were launched. (NHS, 2000; WHO, 1998; Department of Health 1989, 1990, 1997, 1998, 2001as cited by Ross, King, & Firth 2005).IPE was perceived to be an appropriate approach to overcome this



problem, and to promote working relationships between practitioners (Ross, King, & Firth 2005). Observably better working relationship, it was hypothesized, would lead to better team working and consequently enabling patients to obtain a professionally harmonized, inclusive plan of care (Forbes & Fitzimmonds1993; Miller, Ross, & Freeman 1999, 2001; Barr, 2002). According to CAIPE (2002), Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care." It aims at much more than just sitting side-by-side or learning together. IPE is a style of education that enables professionals to extend their outlooks beyond their specialist fields. It helps them to learn how to draw on the expertise and approaches of other professions (CVCP, 2000). IPE has been seen as a potential means of obtaining collaborative competencies, distinguished by Barr (1998). The aim is to create a more positive approach to others, trust among professions, mutual respect and understanding, opening lines of communications, creating opportunities to learn from and about others. The aim of IPE initiatives is to contribute to development and knowledge of others, and foster a desire to permeate while not changing the professional boundaries (Torkington, Lymbery, Milward, Mufin, & Richell, 2004). This seems to be important for professionals to be able to deliver a profession –specific defined service to the community.

## 3. Reflective Learning

Reflective practice has been widely and constantly viewed as "the process of internally examining and exploring an issue of concern, triggered by an experience, which reacts and clarifies meaning in terms of "self" and which results in a changed conceptual perspective" (Boyd and Fales, 1983, p.100). This definition of reflective practice is consistent with symbolic interactionism's concepts of "meaning" and "self" which highlights the importance of the meaning of "things" for individuals in human interactions (Blumer, 1996).

Reflective practice is recognised as a beneficial way for professional development (Clegg, Tan, & Saeidi 2002; Clouder, 2000). For many professions reflection is considered as an indispensable element of practice that potentially leads to integration of theory and practice. It serves as a vehicle to "enhance the awareness of one's assumptions, values and intentions embedded in practice and various social, cultural and psychological forces shaping this assumptions and values" (Tsang, 2007,p.682). This awareness which is a product of a dialogue between components of self (Blumer, 1996) is seen as the fundamental foundation of constant change and improvement on "the continuum of novice to expert" (Dreyfus & Dreyfus, 1985; Benner, 1982; Benner and Tanner, 1987). The object of such internal conversation can include "self," "others," "situations" and "things" (Blumer, 1996). A structured model of reflection (John, 1995; Gibbs, 1988; Schon, 1987; Kolb, 1984) can guide this process. Some models of reflection (Fish and Twinn, 1997; John, 1995) advocate some forms of reflective questions. Smyth (1992) suggested posing questions to be answered in written journals could enhance reflective thinking. The usefulness of posing questions to awaken reflection in individuals has been frequently reported elsewhere (Poskiparta, 1998; Campbell, & Lom, 2006; Tate, 2004; Driscol, 1994; Broockfield, 1995; Taylor, 2000).



Reflective practice if it remains just a uniprofessional activity it is less likely to develop mutual trust and respect. Rather it may lead to development of different meaning and language for different professional backgrounds (Hodge, 2004 as cited in Karban and Smith, 2006). This may lead to professional territoriality and professional ethnocentrism, which are two of the three main barriers, identified by Nyatanga (1998) that may obstruct shared learning. While professions are dealing with the same sort of problems, (things), they need a shared language and meanings to maintain the lines of communication opened and avoid different assumptions made, based on different meaning for the same thing (Griffin, 1997). Different professions are supposed to work together for a shared mission, which is delivering a better healthcare. According to symbolic interaction theory "humans act toward people and things based upon the meaning that they have given to those people or things" (Blumer, 1996). Therefore, different professions need to develop shared meanings, in order to be able to communicate and cooperate effectively. Reflective practice in an interprofessional educational context may contribute to the acquisition of such shared meanings, which lead to a better understanding of other professionals' role and importance and put "others" and "self" into the broader picture of collaborative care.

## 4. The Structure of the Model and the Methodology Underpinning the Questions

The model of reflection discussed in this paper can only be seen as a potential guide to reflection in an interprofessional educational context, not a blueprint for action. This model, like any other models of reflection, is a device that professionals can use and alter later, after employment in different shared learning occasions. On the one hand, reflection contributes to enhanced professional development and maturity and on the other hand, it seems that an ability to learn is required to embark it beyond technical and descriptive levels. In fact until the professional "can move from a position of dualism to a more complex view of knowledge she/he will find it difficult to reflect "(Perry, 1997). Structure and guidance appear to be useful to overcome this problem and enable professionals to achieve deeper levels of reflection. Powell (1989) in her study about reflection in nursing noticed that nurses were inclined to reflect at the technical and descriptive levels if they were not challenged and were not provided a structure. Reflective learning is determined by question and dialogue. By engaging in a reflective dialogue, the professionals enhance their understandings about the experience. The practice of answering questions aids professionals to achieve a deeper level of reflection and enables them to reflect again and possibly find greater meaning (Moon, 1999). In an interprofessional educational context, this meaning can be achieved in the form of a shared meaning, which potentially leads to an increased understanding about others and become a foundation for mutual trust and respect.

The model for reflection suggested in this paper is based on a set of questions designed for the professionals to answer in relation to three personal, professional, and interprofessional levels. The questions and the structure of the model are based on the findings of the PhD project of the corresponding author that was conducted in medicine, nursing, and physiotherapy in Universities of Newcastle upon Tyne and Northumbria from 2004 to 2009. Using a grounded theory methodology (Glaser & Strauss, 1967), in-depth interviews with 38 students and teachers in abovementioned courses were the main source of data. In addition



non-participant observations, analysing students' reflective assignments, and diaries were other sources of data. Data were analysed by theoretical coding to identify concepts and categories. A constant comparison method (Glaser 2004) of data analysis enabled the generation of questions and the levels of the model presented in this paper. This was informed by the literature on reflective practice and IPE.

This model may enable students to "explore, uncover, unpeel, (as the skins of an onion), to get at the core issue and to get (new) insight and begin to understand" (Weinstein, 1999 p.37). Devising such a three level model is based on the assumption that reflection is in essence a personal issue but learning is a socially constructed process (Peddler, 1997; Thorpe Taylor, & Elliot, 1997). It could be argued that in an interprofessional educational milieu, three main human elements are identifiable. These are the "self," the "profession" which self is affiliated to, and "others" which are the members of other profession(s). This can be used as a basis for reflection in order for the novice professionals to find "self", "own profession" and "others" in the wider picture of healthcare, clarify their understandings and obtain a new insight and "a vision of the whole" (Jones, 1996) in their constant progress towards becoming an expert.

Answering questions designed for each level potentially results in raised "awareness" about the topic of reflection. The questions in each level are deliberately designed to bring certain important concepts such as role, identity, importance, interrelationships, boundaries, and limitations of self and others into the scope of reflection. Learners' motivation increase when they encounter learning opportunities about a matter of concern (Schwenk & Withman, 1987). Questions make those issues a matter of interest for them. Considering feelings and emotions is an essential constituent of reflection process in many models (Gibbs, 1988; Boud, Keogh, & Walker, 1985; Kolb, 1984) in fact, reflection starts with a kind of feeling and emotion. This has received attention in each level in line with the hypothesis that it leads to increase in emotional intelligence (EI). EI is defined as" the ability to monitor one's own feelings and emotions to discriminate among them and to use this information to guide thinking and action" (Mayer & Salovey, 1993 p.433).

The reflection in each level starts with questions exploring the identity of "self" "profession" and "others." Answering these questions specifies the topic of reflection enables the individuals to concentrate on the topic and provides the professionals with a starting point and bedrock for reflection on other aspects and elements of IPE. It also helps them to become more aware of their professional identity, which is *consisting of a set of values, attitudes, ideas, knowledge and skills* (Winslade, 2003).

Reflection in the personal level would outcome self- awareness. This is related to "knowing one's internal state, preferences, resources and intuitions (Gendron, 2004). Most of the questions in this level have been built upon three competencies resulted from self awareness identified by Gendron (2004) Figure 1. The first competency is emotional awareness which relates to recognising one's emotions and their effects on thought and action. This is echoed in questions about emotions, and feeling and their effects on the professionals. The ability to assess one's own strengths and limitations and the impacts they may have in social life is



another competency named self-assessment. Some questions in the first level are designed to cover this aspect of personal competency. The last competency described by Gendron is self-confidence which concerns with a well-built self assurance in one's self-worth and abilities. This is a kind of emotional security resulting from faith in one's abilities or capabilities. It is hoped that guided reflective questions make professionals enable to recognise their capabilities and powers and help them to build a better self-confidence, which seems to be necessary to interact in a socially constructed learning situation like IPE. In addition, outer self-awareness (Bayne, Horton, Merry, & Noyes, 1994) which is about an individuals' consciousness about how they are perceived by others underpin some questions in this level. This is in line with the symbolic interactionism's idea of taking others' perspectives to view the self (Blumer, 1996).

The questions provided for the reflection in the professional level enable professionals to develop "profession-specific attitudes" and cohesion, which are required to work as professionals (Figure 2). These profession-specific attitudes are "not inhibited by IPE" experiences (Pollard et al, 2006) and do not contradict its basic assumptions. IPE has been reported to increase personal and professional confidence (Sinclair, 2004; Parsel & Bligh, 1998) and it is achievable whilst professional borders remain intact. This dimension of IPE is supported by providing questions to facilitate a structured reflection on the role and importance of "self" in healthcare team, via bringing the unique contribution and importance of the profession to the scope of reflection. This would potentially contributes to an IPE curriculum to have a more "positive effect on students' attitudes to their own professional relationship" (Pollard, Miers, Gilchrist, & Sayers, 2006) and a sense of professional unity and fellowship.

Contact theory is one of the theories underpinning much thinking about IPE. According to this theory, interaction between different members of different groups under a controlled set of conditions can lead to a reduction in prejudice (Brown, 2005; Allport, 1954). Reduction in prejudice and modifying negative attitude is one of the aims of interprofessional education (Barr 2002, Carpenter, 1995). Reflection on the role and importance of "others" leads to better understanding and a more reinforced acquaintance, which, in turn, lessens prejudice and breaks stereotypes. This is encouraged by asking questions about the role and the importance of others in the healthcare team in the interprofessional level (Figure 3). Reflecting on the inimitable input of other professions to the healthcare team potentially creates respect and appreciation.

Evaluations of IPE programmes and theoretical contemplation suggest that 'contact', 'learning side by side', and 'familiarity' are not enough for attitudinal changes to occur (Dickinson & Carpenter, 2005; Zajonic, 1968; Berkowittz, 1980 as cited in Barr 2002). Indeed, there is the possibility that "contact with others may confirm the reality based negative perceptions" (Barr 2002 p.18). Reflective practice in an appreciative way may enable professionals to "embrace an awareness and appreciation of self and others" (Ghay, 2004) which helps them to overcome their negative perceptions by developing an appreciative way of looking at others, their roles, importance and responsibilities. This is reinforced by urging professionals to reflect on their own feelings about others and their



presence in the team. Appreciative questions in this model may be beneficial in creating an opportunity for the contact hypothesis to take effect. The questions devised for the interprofessional level of this model aid professionals to achieve the collaborative competencies aimed by IPE, distinguished by Barr (1998). Figure 3

Reflections in all levels are interrelated and inform one another so that a constant cycle of reflecting, getting new insight and knowledge, reflecting again, and connecting the outcome of reflection in one level to other levels is aimed and has to be encouraged. In the first level, the model helps professionals to make sense of their own feelings, and emotions. The questions and, the context of the reflection in the first level would inevitably lead the professionals to relate their reflections to "others" which are the members of the profession and other professions. This natural connection is directed through structured reflection in the other levels of the model. This is an incessant cycle of reflection with self, profession, and others professions at the centre, with raised awareness being intended at each level and in relation to other levels. This has been depicted in Diagram 1. It is hoped that engaging in reflection, in this way, enables professionals to put themselves into the bigger picture of the healthcare. Although we are aware that this model has never been piloted in an IPE programme, we would be enthusiastic to see the outcomes of implementing it in the real world.

## 5. Summary

In this paper, an attempt has been made to explain the importance of using reflection in IPE and introduce a simple three level model for this purpose. The three levels of the model are based upon three main human components of an IPE programme, which are self, own profession and other professions. In addition to these three human components of IPE a set of structured reflective questions, were identified in the corresponding author's grounded theory PhD project. Furthermore, theoretical principles of reflective practice, and IPE goals were helpful in devising this model. The outcome of reflection using this model is expected to be a greater awareness about self, own profession and other professions situated in the wider context of the patient care. The greater awareness and better understanding of self and others is an outcome of critical reflection. The theoretical principles underpinning the model have been explored in appropriate points in the paper and in part summarised in Figures 1, 2 and 3. Learning in and through clinical practice has become a model of facilitating IPE as a tool of improving clinical effectiveness (Walshstrom, Sanden, & Hammar, 1997). In fact, there is greater evidence of successful post-registration IPE programs across most professions resulting in changes of practice or enhanced patient care (Hammick 2000). The questions of this model can be used in prompting deep reflection in students across such programs and after any IPE learning experience using the shared learning occasions as a basis for reflection under the supervision of the tutors or supervisors. Students may write their answers to questions and discuss them with their supervisors or peers in a safe environment. It is hoped that using this model would lead to more clarity of meanings, increase in knowledge and understanding of the importance of IPE in healthcare education.



Figure 1. The reflective questions and some literature underpinning the questions at the personal level

The questions identified to guide	Literature underpinning the questions at
reflection at the personal level	the personal evel
Who/ what I am?	Gendron's (2004) three personal
What is my role?	competencies:
What does his pole mean to me?	Emotional awareness (recognizing
What is my beling about it?	one's emotions and their effects)
Why do I feel like this?	<ul> <li>Self assessment (knowing one's</li> </ul>
What are the effects of my feelings on my	strengths and limits
thoughts and actions?	• Self confidence (Strong sense of
How can I play my role better?	one's self worth and capabilities
How others see my role and me?	
How do they feel about me?	Bayne, Horton, Merry, & Noyes, (1994)
How do I know this?	model of self-awareness:
What are my strength and limitations?	Outer self-awareness which
How can I use my strengths to address	concerns an individuals'
my limitations?	awareness of their own behaviour
What I have learned from this reflection?	and how they are perceived by
	others
	Attending and considering the feelings Gibbs 1988, Boud, Keogh, & Walker
	(1985), Kolb 1984
	Symbolic interactionist's notion of the
	importance of the meaning of "things" in
	human conduct (Blumer 1996)



Figure 2. The reflective questions and some literature underpinning the questions at the professional level

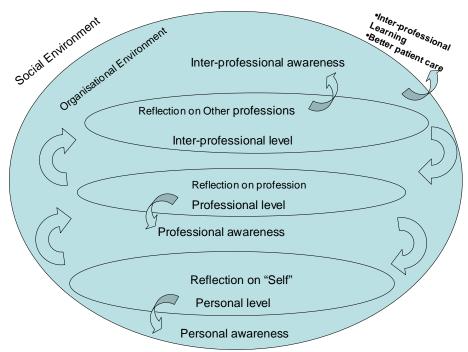
The questions identified guide	Literature underpinning the questions at
reflection at the professional level	the professional level
What is my professional identity?	Professional identity (Winslade, 2003)
What does being a professional mean to	
me?	
	"Vision of the whole" (Jones, 1996)
What are the basic assumptions of my	
profession?	
	Appreciative reflection (Ghaye, 2004)
What are the boundaries /limitation of my	
profession?	
What are the outstanding/unique	
contributions my profession makes to the	
healthcare team?	
nouncure touin.	
Where my profession stands in the bigger	
picture of healthcare?	
How do I feel about this?	
What have I learned from this reflection?	



Figure 3. The reflective questions and some literature underpinning the questions at the interprofessional level

Reflective questions at the	Literature underpinning the questions at
interprofessional level	the interprofessional level
Who are they (members of other	Collaborative competencies distinguished
professions)?	by Barr (1998):
What is their role in the context of healthcare?	<ul> <li>Describe one's own roles and responsibilities clearly to others</li> <li>Recognise and observe the constrains of one's role, and</li> </ul>
What are the commonalities /differences between us?	responsibilities  Recognise and respect the role, responsibilities and competence
How important is their role in the context of healthcare?	of other professions  • Enter into interdependent relationships, teaching and
What is their unique /outstanding contribution to healthcare team?	learning from
How do I feel about their role and importance?	Learning together working together (Jones 1986)
What can I learn from them?	(Jones 1900)
Have I learnt from them?	
What can I teach them about my role, my responsibilities, and myself?	
Have I thought them any?	
What can we learn together?	
What can we do together?	
What is our shared mission?	
What do they think/feel about me/us?	





Reflective Practice at the service of Inter-professional Education

Diagram 1. The Model of Reflection in Interprofessional Education

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# Glossary

IPE: Interprofessional Education