Peer Mentoring in Higher Education:

A Literature Review

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Summary

The aim of this review is to provide a broad overview of the extant literature in respect of student-focused reciprocal learning and support activities in Higher Education. In order to achieve this aim the literature review commences by discussing the wider context and background relevant to peer mentoring. The widening participation agenda is considered with particular attention being paid to the impact of the massification of higher education over the past two decades. This is followed by a brief overview of student learning styles and approaches. Issues surrounding student support and retention are then summarised.

The main part of the review is split into two main sections. The first of these focuses upon what is conceptualised as 'traditional mentoring' involving a dyadic relationship between a senior and junior colleagues in a work situation. This part of the review commences by drawing attention to difficulties conceptualising and defining mentoring. Various definitions, models and typologies are reviewed. Following this, a discussion of various sociological critiques previously used to analyse mentoring is given; after which the benefits and challenges associated with mentoring are identified.

The second part of the review focuses on reciprocal peer learning and support in Higher Education and encapsulates literature pertaining to peer mentoring, peer tutoring and associated concepts.

The discussion draws attention to the need for further empirical research in this area. Several research questions, which have emerged out of the literature, are outlined in the final part of the document.

Section 1: Introduction: Context & Background

This literature review provides a synopsis of the extant literature pertaining to peer mentoring within the context of the 'Pathways to Success' Project[1]. It comprises a critical overview of the relevant academic and practitioner papers and texts. The terminologies used in this review reflect those used in literature and include: peer mentoring; peer tutoring; peer assisted learning; peer support; peer guiding; and supplemental instruction.

- **Background**

The massification of Higher Education (HE) has resulted in increased pressures for Universities to provide a service that is seen to offer 'value for money' (Capstick & Fleming, 2002; Fox & Stevenson, 2006). In the UK, such pressures have originated both from the students and from the government (Johnston, 2001). Two of the most obvious changes reflect an increase in student numbers and alterations to the demographic make up of the student body (in terms of age, culture, ethnicity and social standing). Moreover, in addition to increased financial pressure across the HE sector, the growth in the numbers of *non-traditional* students means universities are now faced with large numbers of students many of whom may need additional help to cope with university life (Fox & Stevenson, 2006). One of the most notable outcomes of increased student numbers and reduced resources can be seen in the university classroom with a '*reversion to traditional lectures*' and less small group and tutorial teaching (Reid et al, 1997, p 3). Traditional lectures tend to be in large lecture theatres, with class sizes often comprising over 100 students. It is easy to see how students remain anonymous within this environment and in doing so perceive themselves to be unsupported.

In addition to difficulties associated with large classrooms, problems have been identified with high drop out rates on an international basis (Pitkethly and Prosser, 2001). This has resulted in the first-year experience coming under increasing scrutiny. Indeed the quality of support provided by universities during the transition

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[1] The Pathways to Success project is a large HEFCE / Paul Hamlyn funded project which involves a case-study analysis of 8 HEIs: Aston University: Bangor University: London Metropolitan University: Liverpool Hope University: Sheffield University: Oxford Brookes University: Oslo College of Higher Education, Norway: York University, Canada

period from school to Higher Education (HE) is identified as critical to student retention (Pitkethly and Prosser, 2001). Additionally, many HE departments find themselves criticised for failing to promote the development of transferable skills in their students (Barnett 1992, Ellis 1993).

Thus, it seems essential that Higher Education Institutions (HEIs) promote student success through the introduction of programmes that address physical orientation whilst providing social and academic support (Krause, 2001). However, whilst the literature suggests that peer mentoring provides the ideal medium for such support, other factors need to be taken into account including individual student learning styles and wider policy-related context in which mentoring occurs. Both of these are now briefly discussed.

- **Context: Student Learning Styles**

One of the more negative outcomes of the expansion of Higher Education relates to concerns that the manner in which the curriculum is currently delivered promotes a surface rather than a deep or strategic approach to learning (Reid et al, 1997). The following paragraphs further explore this issue.

An early critique of student learning originates from Riechmann and Grasha (1974) who propose six different learning styles *'independent; dependent; avoidant; participant; collaborative; and competitive'* (pp 213-223). Whilst relevant to Higher Education, a weakness with this approach is that it does not encapsulate learners' wider experiences or perspectives. An alternative approach, comes from Kolb (1984) who proposes the concept of 'learning cycles'. From this approach learners' experiences comprise: (i) reflection and observation; (ii) conceptualisation and analysis; (iii) the testing and application of ideas. Learning is the result of: . . . *both a grasp or figurative representation of experience and some transformation of that representation . . . . The simple perception of experience is not sufficient for learning; something must be done with it. Similarly, transformation alone cannot represent learning, for there must be something to be transformed, some state or experience that is being acted upon* (Kolb, 1984, 1). From a pedagogical perspective, the value of this approach is that it provides the means by which the application of knowledge may be contextualised and conceptualised. Indeed, in discussing the

transformation of knowledge, Kolb continues to argue that individuals have different methods of turning experience into learning (1984). Such methods are described as 'learning styles'. Four different categories of learning styles are identified: Accommodators: Divergers: Assimilators; and, Convergers. Accommodators learn from 'hands-on' experience rather than from logical analysis. Divergers tend to see the bigger picture and learn from taking a wide perspective. Assimilators have the ability to understand a vast amount of information which they put in a concise and logical format. Convergers take a practical approach to learning by applying their knowledge and finding practical uses for ideas and theories (Kolb, 1984).

Lawson and Johnson (2002) review the work of Kolb (1984) and expand the concept of learning styles by grouping learners into four learning types: Thinkers, Feelers, Doers and Observers. Thinkers adopt a logical stance to learning. Feelers tend to be people-orientated and learn from specific examples and peer discussion. Doers follow an active approach to learning, using experimentation and project-based approaches. Whilst Observers utilise an impartial, less active approach preferring traditional lectures and class-based 'formal' lectures. Like Kolb, Lawson & Johnson provide the means by which learning in Higher Education may be further conceptualised (2002).

An alternative approach is offered by Prosser and Trigwell (1999) who draw attention to the notion of 'constitutionalism' whereby '*meaning is constituted through an internal relationship between the individual and the world*' (Prosser & Trigwell, 1999, p. 12). The concept of 'constitutionalism' is encapsulated in the presentation of a presage-process-product model of student learning which aims to contextualize student learning. In addition to course design and context, other factors including previous experiences and demographic background, influence how students' perceive and approach their learning. Such factors ultimately impact what is learned (Prosser & Trigwell, 1999).

Other relevant work comes from Biggs (1999), who adopts a social constructivist approach and argues that learning styles and experiences reflect individual constructions of their environment. Whereas Fleming (2001) identifies four student learning preferences: Visual: Aural: Reading / Writing: and, Kinesthetic. From this

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perspective teachers need to match their methods of teaching with the learning styles of their students.

It should be noted that this brief overview represents only a small amount of literature in this area. However, what is evident is that student learning styles vary greatly. Moreover, in order to accommodate such variety, it is important that HEIs put into place support mechanisms which take account of student learning preferences and differences; whilst providing an environment in which students may become independent and proactive learners.

- **Context: Student Support and Retention**

In considering the need for HEIs to put into place support mechanisms to assist students adapt to university, it is important to take account of arguments that most students' failure or withdrawal tends to reflect difficulties in adjusting to the environment rather than intellectual problems (Pitkethly and Prosser, 2001). From this perspective, it may be postulated that enhanced student success in higher education may be facilitated by the development of student-focused support programmes aimed at addressing physical and social orientation as well as academic and discipline specific issues (Saunders, 1992; Krause, 2001; Fox & Stephenson, 2006).

One approach which seems particularly relevant to the concept of reciprocal peer learning comes from Tinto (1987) who identifies six principles of student support necessary for first year success and progression:

1. Students should be given the opportunity to acquire the skills necessary for academic success.
2. Systems need to be put into place so that personal contact with students extends beyond academic life.
3. Any strategies put into place to promote student retention need to be systematically applied.
4. Such strategies need to address students' needs early in the academic year.
5. All student retention strategies should be student-centred.
6. All retention strategies should have an educationally focused aim.

Tinto (1987) continues to argue that the most effective retention strategy for universities is teaching students how to learn.

The previous paragraphs have provided a brief insight into the wider context and background to contemporary Higher Education and student learning. It is within this wider context that peer mentoring programmes have been introduced in order to enhance students' learning development. The following section contextualises mentoring by providing a brief analysis of the literature focusing on *traditional* mentoring, in doing so draws attention to various theoretical and conceptual approaches and models.

Section 2: Conceptualising Mentoring

- **Historic Context**

Two main historical perspectives are described in the literature. The first of these, proposed by Woodd (1997), discusses the historical roots of mentoring and notes that the term originates in the *'the story of Ulysses and his son Telemachus… the son was entrusted by his father into the care of Mentor. Mentor was old and wise and took charge of the son's education helping him mature'* (pp. 333-334). Joyce et al (1997) also conceptualise the term 'mentor' from a historical perspective arguing that Mentor, a tutor, was given the responsibility of caring for Odysseus' son, Telemachus, whilst Odysseus left to fight the Trojan War. Mentor's role was to counsel the son and groom him to become king (for further details see Bell, 1996; Clawson, 1980). Whilst slightly different, these two accounts contextualise the term mentor as traditionally referring to an older, wiser and more experienced teacher or tutor (Clutterbuck, 1991). This perspective is supported by Ehrich et al (2004) who argue that a mentor is *'a father figure who sponsors, guides, and develops a younger person'* (Ehrich et al, 2004, p 519).

An alternative perspective comes from Cropper (2000) who describes an African conceptualisation of mentoring whereby in the Ethiopian Amharic language the word *'Jegna'* means mentor (p 600). Cropper argues that within contemporary society mentoring is used in many different organisational settings and is generally accepted to refer to *'a more experienced and respected member of a group who will offer support, guidance, coaching and tutoring'* (2000, p 600). In addition to encapsulating the historical perspectives described above, this perspective widens the concept of mentoring by taking account of modern-day phenomena such as coaching and tutoring.

- **Defining Mentoring, Theoretical & Conceptual Issues**

Whilst there exists a substantial amount of literature focusing upon mentoring dating back some 30 years, such literature has failed to fully conceptualise what is meant by the term 'mentoring' (Chandler, 2005). Moreover, changes in the nature of work towards the end of the 20th century have further necessitated the re-

conceptualisation of mentoring as social phenomena (Hall, 1996; Peiperl & Arthur, 2000; Arthur & Rousseau, 1996; Higgins & Kram, 2001). In discussing this issue within an organisational context, Woodd (1997), argues that there is a clear need for a new definition of mentoring, and that such a definition should encapsulate peer relationships between a new member of staff and a mentor who is at the same, or similar level, in the organisation. Furthermore, Woodd contests that any new conceptualisation of mentoring must be flexible enough to accommodate different learning styles, needs, skills and abilities (1997).

One of the main problems in conceptualising mentoring for the purpose of academic study is that across the literature various terminologies are used to describe mentoring activities. Such terminologies, which include guiding, tutoring, assisted learning, coaching and sponsorship, are frequently mixed-up or used interchangeably (for further discussion regarding this area see Gray, 1988; Keele et al, 1987; Yoder, 1995; Chao, 1988). This results in confusion and a lack of clarity, further compounding the complexities of conceptualising mentoring and peer mentoring within a research setting (D'Abate et al, 2003).

The difficulties of conceptualising and contextualising mentoring reflect the complex and multifaceted nature of the various activities undertaken under the remit of 'mentoring'. In discussing such difficulties Merriam (1983) argues *'The phenomenon of mentoring is not clearly contextualized, leading to confusion as just what is being measured or offered as an ingredient in success. Mentoring appears to mean one thing to developmental psychologists, another thing to business people, and a third thing to those in academic settings' (p 169).* Whilst professional conceptualisations of mentoring reflect the various terminologies used to define mentoring activities, what brings all of the definitions together from a conceptual perspective is the unique nature of the relationship between the participants individuals involved in mentoring activities (irrespective of whether such mentoring activity is defined as mentoring, guiding, tutoring or coaching).

In discussing the relational context of mentoring Cropper (2000) argues that mentoring may be placed within a *'personal and community empowerment context where mentors act as a critical friend who can assist with personal development while at the same time understanding the wider social issues operating in society and*

replicated in organisations' (p 602). Whilst another view is that mentoring offers an *'encouraging and supportive one-to-one relationship with a more experienced worker (who is not a line manager) in a joint area of interest... [ ] characterised by positive role modelling, promotion of raised aspirations, positive reinforcement, open-ended counselling, and joint problem-solving.'* (Topping, 2005, p 632).

In addition to the unique nature of the relationships between the individuals concerned, another important aspect of mentoring is the transfer of knowledge – which is generally perceived to be from mentor to mentee. This perspective is discussed by Clutterbuck (1991) who argues that traditionally a mentor is perceived to be an older, experienced individual who passes on knowledge of how a task is done to a younger less experienced colleague. This suggests that mentoring relationships are hierarchical in nature, a point raised by Joyce et al (1997) who argue that much of the literature conceptualises mentoring in terms of it being *'an intense interpersonal exchange between a senior experienced colleague (mentor) and a less experienced junior colleague (protégé) in which the mentor provides support, direction, and feedback regarding career plans and personal development'* (for further literature in this area see Dalton et al, 1977; Hall, 1976; Levinson et al, 1978; Kram, 1983).

In developing this approach Peyton (2001) argues that definitions of mentoring differ depending upon the context. A 'common' definition of mentoring is proposed which captures the hierarchical and knowledge-exchange aspects of mentoring thus... *'[Mentoring is a relationship] in which an individual with more expertise provides knowledge and information to a less experienced individual'* (Peyton et al, 2001, p 351). Blackwell (1989) also focuses on the authoritarian and experiential aspect of mentoring relationships and conceptualise mentoring as *'a process by which persons of superior rank, special achievements and prestige instruct, counsel, guide and facilitate the intellectual and/ or career development of persons identified as protégés'* (pg 9). Whilst the value of framing mentoring within a relational context is discussed by Moore & Amey (1988) who draw attention to the phenomenon of professional socialization within mentoring relationships *'...mentoring is a form of professional socialization whereby a more experienced (usually older) individual acts as a guide, role model, teacher and patron of a less experienced (often younger)*

protégé. The aim of the relationship is the further development and refinement of the protégé's skills, abilities, and understanding' (Moore & Amey, 1988, p 45).

All of these definitions have in common a focus on the professional and personal developmental nature of mentoring. In building on this perspective Megginson (1994) draws attention to the value of mentoring in terms of its role in assisting individuals cope with various life challenges... *'a mentor is a person who helps another individual to address the major transitions or thresholds that the individual is facing and to deal with them in a developmental way'* (p 165). This emphasis on 'transition' draws attention to the temporal aspect of the mentoring relationship. This perspective is also discussed by Burlew (1991) who suggests that the time period in which mentoring occurs depends upon the needs and wishes of both the mentor and mentee. In further considering the various definitions of the term mentoring it is evident that many previous researchers have conceptualised mentoring in terms of it having a career development and professional socialization focus within a time-limited occupational setting. In sum, mentoring within the workplace is possible best conceived by Pedler (1983) who argued that the act of mentoring involves being a 'critical friend'.

Across the literature mentoring is generally viewed in a positive light, associated with helping and volunteering (Allen, 2003). In discussing this Allen (2003) & Allen et al (2004) argue that the positive link between mentoring and helping means that mentoring is usually perceived to be a form of pro-social behaviour. Although mentoring is conceived as a pro-social behaviour, much previous study in this area focuses solely on work-based programmes and conceptualises mentoring as being hierarchical and dyadic in nature.

In conceptualising mentoring as comprising single dyadic relationships Chandler (2005) argues that within such relationships several key research questions are raised. The first of these relates to the manner in which mentoring may fit into the *'new career context'* (Chandler, 2005, p 9). This is particularly important given the often sporadic and short-term nature of employment within contemporary society. A second question focuses on the manner in which the developmental role of mentors may work across organisations and whether such relationships survive when the mentor or mentee leave the original organisation. Thirdly, Chandler argues that it is

important to examine the nature of dyadic mentoring relationships taking into account various demographic factors including age, gender, and nationality (2005). Having drawn attention to the value of relationships in mentoring, Chandler (2005) continues to describe various *salient mentoring concepts* which encapsulate individual-level factors and relational processes and characteristics (p41). At an individual level, factors impacting the mentoring relationship include the stage of the mentor's career and the willingness of the mentee to participate in mentoring. Other relevant factors incorporate the complexities of gender and race within the relationship, and take into consideration the willingness of mentor and mentee to develop cross-cultural relationships. Relational processes and characteristics encapsulate the dynamics of the mentoring relationship and reflect the networks the mentor is able to introduce the mentee to, and the manner in which learning is approached within the mentoring relationships. Mentoring outcomes are reflected in the unique benefits of the mentoring relationship as well as more tangible outcomes such as career advancement and job satisfaction (Chandler, 2005, p 41)

An alternative perspective comes from McManus and Russell (1997) who rather than focus on relationships conceptualise mentoring within a range of other constructs using a *'theoretical nomological network'* (p. 145). This approach looks at the overlaps between mentoring, leadership, organizational citizenship behaviour and support (McManus & Russell, 1997). D'Abate et al (2003) critique McManus & Russell's (1997) nomonological network approach and argue that it can be advanced in several ways. They suggest that developmental constructs such as tutoring, apprenticeship and action learning could be included within the approach and continue to argue that conceptualisations of mentoring and coaching as being the same activity fail to take account of the different constructs within each activity arguing that traditional mentoring involves supporting an individual to develop their general skills, whereas coaching is more strongly associated with the development of one specific skill (D'Abate et al, 2003). Furthermore, coaching activities tend to occur over a short time period, whereas traditional mentoring reflects the development of relationships over a longer time period. Behaviours associated with traditional mentoring include modelling, counselling, supporting and advocacy; whilst coaching behaviours encapsulate goal setting, the practical application of skills, and providing feedback and teaching (D'Abate et al, 2003). The value in drawing a distinction between mentoring and coaching is that by focusing on the different characteristics

of each construct, it is possible to make *connections and distinctions across multiple developmental interaction constructs* (D'Abate et al, 2003, p 376).

Whilst there exists substantial literature pertaining to traditional conceptualisations of mentoring, literature focusing on peer mentoring specifically is scarce. However, an early discussion of peer mentoring comes from Kennedy (1980) who argues that peer mentoring involves a 'delayed' reciprocal relationship whereby the peer mentor shares interests and knowledge with the mentee on the understanding that it will be reciprocated at a later time. This viewpoint appears contradictory in nature, describing what may arguably be a more traditional mentoring relationship.

Although much of the literature conceptualises mentoring from a hierarchical perspective, some researchers suggest that mentoring relationships can occur across a broad range of relationships, and not necessarily in a downwardly aligned dyadic manner (Higgins, 2000; Higgins & Kram, 2001; Higgins & Thomas, 2001). It is from this perspective, in which mentoring is seen as a mutual relationship, and that peer mentoring and peer tutoring, including peer mentoring and tutoring, may be conceptualised. Within an educational setting, such mutually beneficial peer focused relationships are often viewed as 'developmental' (Higgins, 2000, p. 278; Higgins & Kram, 2001, p. 269).

Eby (1997) discusses mentoring within the context of the changing nature of work and conceptualises mentoring as focusing on two different dimensions: mentoring between individuals within an equal relationship (lateral relationships); and hierarchical mentoring whereby a more senior person mentors an less experienced or skilled individual (hierarchical mentor-protégé relationships). Peer mentoring is conceptualised as encapsulating lateral relationships within a career development setting (Eby, 1997).

One definitive conceptualisation of peer mentoring is given by Topping (2005) who argues that... '*Peer mentoring is typically conducted between people of equal status'* (p 351). This definition moves away from the traditional view of mentoring in that it suggests peer mentoring involves a relationship between equals, rather than between a senior, more experienced person and a less experienced, often younger individual. Likewise, the partnership aspect of mentoring was also discussed by

Maynard & Furlong (1993) who took a more focused and individual approach within a 'reflexive practitioner' model of peer mentoring. Their model incorporates the notions of sharing, and suggests that within the mentoring relationship peer mentors assist mentees examine their own practice in a non-hierarchical and non-judgemental manner (Maynard & Furlong, 1993).

An alternative approach which may be utilised to analyse and conceptualise both mentoring and peer mentoring is social constructivism. From this approach mentoring and peer mentoring may be contextualised in relation to how the mentor and mentee perceive, and so construct that relationship. Moreover, the manner in which such tasks and issues are constructed reflect individual mentor and mentees educational and personal background and development, as well as their approach to knowledge and learning (Topping, 1996).

-   **Typologies of Mentoring**

In addition to the main definitions and conceptualisations of mentoring, various typologies of mentoring are also proposed within the literature. An early example of such a typology comes from Shapiro et al (1978) who identify a continuum of activity: *Peer Pals*, people at the same level who share information and mutual support: *Guides*, who explain the system but are not in a position to champion a protégé: *Sponsors*, less powerful than Patrons in promoting the career of a protégé: *Patrons*, influential people who use their power to shape the career of a protégé: *Mentors*, develop a paternalistic relationship with their protégés in which they adopt the role of teacher and advocate (pp 51-58). This expansive typology is useful in that it provides a broad functional overview of mentoring. A slightly different functional approach comes from Kram and Isabella (1985) who identify the functions of the mentoring relationship: Information peers, for information sharing: Collegial peers, for career support: and Special peers, for confirmation, emotional support, personal feedback and friendship (pp 110-132)

A more developed typology is proposed by Shandley (1989) who brings together the various relational aspects of mentoring … *'Firstly, it is an internal process of interaction between at least two individuals… Second, mentoring is a nurturing process that fosters the growth and development of the protégé… Third, mentoring*

is an insightful process in which the wisdom of the mentor is acquired and applied by the protégé... Fourth, mentoring is a supportive, often protective process. The mentor can serve as an important guide or reality checker... ... Finally... an essential component of serving as a mentor is role modeling' (p 60).

An alternative perspective is offered by Kram (1985a, 1985b) who contextualises mentoring within temporal framework describing four separate phases of the mentoring relationship: The initiation period which occurs within the first 6 to 12 months; the cultivation phase which lasts anywhere between 2 and 5 years and involves more intense relationships; the separation phase which occurs over a period of 6 to 24 months and is characterised by structural and psychological separation between the mentor and protégé; and the final phase whereby the relationship is redefined and so changes from mentoring to collegiality.

In sum, four different approaches to conceptualising mentoring are proposed in the afore mentioned typologies: activity based; relational; functional; and temporal. Whilst the conceptual and paradigmatic value of these approaches varies, there is little doubt of the contribution made by each approach in terms of framing mentoring for the purposes of academic investigation.

- **Mentoring and work**

Various studies contextualise mentoring from an organisational perspective, focusing specifically on mentoring relationships within a work environment. An early study comes from Kram (1985a) who conducted interviews with protégés and mentors in a large business organization. In analysing the study findings, Kram differentiates between career-focused and psychosocial mentoring (1985a).

The role of mentoring in professional leadership training is also highlighted by Woodd (1997) who describes the manner in which mentoring is used as a tool to promote personal, career and professional development within the military where it is used to help less experienced individuals learn from seniors to develop their own style of leadership. Likewise, the value of mentoring within the work environment is also discussed by Ehrich et al (2004) who argue that traditional or informal mentoring arrangements, whereby mentor and mentees simply pair up (Kram,

1985a) continues to operate in many different areas. In considering the value of mentoring to the work environment it is evident that informal mentoring is widespread and is, in many respects, out of the sphere of formal management. What is evident from the literature is that the benefit of mentoring for both the individuals concerned and the organisations in which they are placed extends far beyond personal and professional development (Ehrich & Hansford, 1999). Indeed, both informal and formal mentoring does much to increase and enhance organisational capacity.

Section 3: Research Critiquing *Traditional* Mentoring

-   **Sociological critiques of mentoring**

Much previous research has drawn attention the benefits and challenges associated with traditional mentoring. However, few previous studies have attempted to critically analyse mentoring from a sociological perspective. One exception to this is Cropper (2000) who argues that from a feminist perspective, one of the problems with mentoring is that it may be seen as an individual solution to institutional or structural problems. This is particularly an issue with mentoring schemes aimed at those from socially deprived groups who may experience disadvantage in many different settings. The danger is that in such cases mentoring can be viewed as a marginalised, liberal activity focusing on the individual without dealing with structural or institutional issues and in turn promoting the status quo (Cropper, 2000).

Although not adopting a feminist perspective, Chandler (2005) discusses gender differences in respect of the manner in which men and women approach mentoring and argues that mentoring between males tends to focus on instrumental support within a career-advancement framework; whereas mentoring relationships between women is more focused on relational and psychosocial support (Chandler, 2005, p 8). Difficulties with sexual discrimination within mentoring relationships have been reported in some settings (Clawson & Kram, 1984); whilst other reports suggest women have missed out on mentoring due to organisational gender misbalances (Noe, 1988a, 1988b; Ragins, 1989). Similar difficulties (in terms of missing out on mentoring and discrimination within the mentoring relationship) are reported in relation to some minority groups. In a study analysing diversity from the mentors' perspectives, Thomas et al (2005) argue '*Given the lack of organizational status and power differences in peer relationships, diverse peer mentors may have greater opportunity to communicate about diversity and foster an understanding of it*' (p553). From this perspective mentoring may be viewed as providing a mechanism by which organisational diversity could be expanded. However, in discussing this issue a cautionary note is given by Ehrich et al (2004) who analyse the impact of gender, ethnicity and race on mentoring and in doing so highlight the need for careful matching within mentoring.

The lack of critical conceptualisations and analyses of mentoring and peer mentoring suggest there is clearly much room for further academic critique in respect of the nature of diverse relationships within mentoring. This is particularly the case from a pedagogical and andragogical perspective. Possible approaches with which reciprocal peer learning may be researched and analysed are discussed at the end of this review.

- **The Benefits of Traditional Mentoring.**

One key study which analyses traditional formal mentoring programmes comes from Ehrich et al (2004) who undertook a large literature review analysing mentoring programmes in three professions: medicine, business and education. Ehrich et al (2004) argue that the personal development outcomes of mentoring identified in the literature relate to Kram's (1983, 1985a, 1985b) notion of the psycho-social outcomes of mentoring for both mentors and mentees. Such outcomes include personal growth, increased confidence, and self esteem as well as enhanced interpersonal contacts (Ehrich et al, 2004). Ehrich et al (2004) continue to argue that issues relating to the sharing of ideas and knowledge are benefits common to both mentors and mentees. Other positive commonalities relate to the opportunity for reflection and professional development.

The most frequently reported positive outcome identified in the literature review undertaken by Ehrich et al is collegiality and networking and sharing of ideas (2004). The second most noted benefit for mentors represents an increase in reflection and reflective practice, with a significant amount of the literature contesting that involvement in mentoring promotes reflection and appraisal of beliefs, ideas and practices. Other benefits for mentors include personal reward, growth or satisfaction (Ehrich et al, 2004).

Whilst Ehrich et al's (2004) study supports previous findings from Joyce et al (1997) who argue that from a psychological perspective, the intense interpersonal relationship characteristic of successful mentoring has key benefits for the protégé, mentor, and organization, other studies show that from the mentor's perspective, mentoring enhances individuals' sense of self-worth and self-esteem (Dalton & Thompson, 1986; Dalton et al, 1977). In addition to this, the literature suggests that

participation in mentoring affords several work-related and socially focused rewards and benefits for mentors. Such rewards include greater organisational status as well as personal satisfaction and fulfilment (Ragins & Scandura, 1994). Mentors also benefit from the creativity and energy of the protégé (Kram, 1985) in addition to acquiring a sense of rejuvenation (Levinson et al, 1978). Furthermore, the mentor is likely to benefit from the loyal support base of the protégé and from organisational recognition given is respect of his or her capabilities as a teacher and advisor (Kram, 1985). In the longer term, the relationship between mentor and protégé can result in a loyal support base for the mentee as well as for the mentor (Kram, 1985).

Early research by Levinson et al (1978) highlights the value of mentoring for young men arguing that the relationship afforded by having a mentor represents one of the most important relationships in a young man's adult life. Later work by Levinson & Levinson (1996) identified similar benefits for young women mentees who participated in mentoring.

The benefits of mentoring from the perspective of the mentee are also discussed by Sanchez et al (2006) who argue that when compared to non-mentored individuals, protégés receive: greater career development and personal growth (Noe, 1988); have higher job satisfaction (Corzine et al, 1995); and achieve greater career attainment (Turban & Dougherty, 1994).

Organisational benefits of providing traditional mentoring programmes are identified by Murray and Owen (1991) who argue that formal mentoring: increases productivity; improves recruitment; motivates senior staff; and enhances service levels across the organisation. The value of mentoring in terms of increased productivity and enhanced workplace environment are also highlighted by Ehrich et al (2004) who argue that other positive organisational outcomes relate to retention of employees, the promotion of loyalty and improvements to workplace communications.

From the literature it is clear that mentoring has psychosocial and occupational benefits for both parties within the mentoring relationship. What is also evident is that the supportive nature of mentoring has far-reaching beneficial effects for both the individuals involved and the organisations in which they are placed. Indeed, the

role of mentors in providing support to junior colleagues in the removal of organisational barriers to advance their career not only benefits the individual but also increases organisational capacity in terms of the management of professionals and junior managers (Hunt & Michael, 1983; Joyce et al, 1997; Noe, 1988a; Wilson & Elman, 1990; Zey, 1984).

- **The Challenges of Traditional Mentoring.**

Like all relationally-focused programmes and projects, the individual and organisational outcomes of mentoring are not always positive. Long (1997) identifies various challenges for both mentors and mentees and argues '*under various conditions, the mentoring relationship can actually be detrimental to the mentor, mentee or both*' (p. 115). Long continues to identify various concerns for those participating in mentoring, including; time constraints, poor planning of activities within the mentoring process, unsuccessful matching of mentors and mentees, misunderstandings about the mentoring process, and difficulties in accessing mentors for minority groups (1997).

Ehrich et al (2004) also identify numerous challenges in respect of involvement in mentoring for both mentees and mentors and note that for mentors, the main issues reported in the mentoring literature, relate to: a lack of time; a lack of training; unsuitable pairings manifested by professional incompatibility; and perceptions that mentee behaviour is not acceptable (including a lack of commitment and unrealistic expectations). Some mentors perceive mentoring to be burdensome and an increase of their workload. Other difficulties reported by mentors relate to a lack of training and preparation for the mentoring role. This results in uncertainty regarding the aims and goals of the mentoring programme. In addition to this, problems associated with race and gender are identified for mentors within the business profession. Such problems reflect males being paired with females and people of different ethnic groups being paired together. Similar difficulties were reported by mentees (Ehrich et al, 2004).

Difficulties identified in the literature pertaining specifically to mentees include: a lack of mentor interest; inadequate training of mentors; problems' with mentor behaviours (overly critical or defensive); and perceptions that asking for help

equates to a weakness. Mentoring relationship 'mismatches' generally reflect professional or personal incompatibility and include issues of gender and race (Ehrich et al, 2004).

In addition to individual challenges, the provision of formal mentoring programmes may also cause some managerial and administrative problems for the organisations in which the mentoring occurs. One of the practical difficulties associated with mentoring is identified by Jacobi (1991) who draws attention to difficulties associated with manner in which formal mentoring programmes are evaluated; with some organisations carefully monitoring the success and value of the programmes whilst others use weak or vague evaluative techniques (Jacobi, 1991). From a research perspective this makes the possibility of undertaking cross-organisational evaluations of mentoring difficult.

Other organisational difficulties are identified by Douglas (1997) who points to problems: coordinating mentoring initiatives within a wider organisational ethos or remit; around funding and resource management: maintaining cross-organisational support for mentoring (Douglas, 1997). Whilst a detailed analysis of the organisational challenges associated with mentoring programmes is offered by Ehrich et al (2004) who draw attention to various issues including: a lack of commitment from management often manifested by a belief that mentoring should not be formalised; high staff-turnover; a lack of partnership working amongst staff; difficulties for staff in relation to time management, particularly around the timing of mentoring meetings to fit the wider organisational schedule; funding and resource related difficulties including problems administering mentoring programmes; and cultural or gender biases resulting in negative experiences for mentees and mentors alike (Ehrich et al, 2004).

To summarise, having considered the benefits and challenges of mentoring it may be concluded that most of the benefits are **individually** experienced, reliant on the quality of the mentoring relationship. Conversely, the challenges of mentoring tend to reflect **organisational** and administrative issues such as a lack of time or a weak organisational structure.

Section 4: Reciprocal Peer Learning & Support in Education

Conceptualisations of Peer Learning

Like **traditional** mentoring, various terminologies are used across the literature to describe **peer** mentoring activities. Such terminologies include Peer Tutoring, Peer Assisted Learning and Supplemental Instruction. The value of Peer Tutoring from a teaching perspective is probably best summed up by Topping (2005) who contests... *'Arguably, there is no better apprenticeship for being a helper than being helped'* (p 634).

Work by Vygotsky (1978) is useful in encapsulating and defining the pedagogical value of reciprocal learning. Vygotsky (1978) introduced the concept of the 'zone of proximal development' in which student learning is prompted and enhanced by interaction with peers arguing that ... '*an essential feature of learning is that it creates the zone of proximal development; that is learning awakens a variety of internal developmental processes that are able to operate only when the [student] is interacting with people in his environment and in cooperation with his peers. Once these processes are internalised, they become part of the [student's] independent developmental achievement . . . . developmental processes do not coincide with learning processes. Rather, the developmental process lags behind the learning process; this sequence then results in zones of proximal development* (1978, p 90). In sum, Vygotsky's (1978) theory of the 'zone of proximal development' suggests that an individual can enhance the cognitive level they are able to achieve on their own by learning with a more capable peer (or teacher).

It is within this zone of proximinal development that the following sections, focusing on the various aspects of peer mentoring and learning, may be contextualised.

Peer Mentoring and Tutoring in Higher Education: Definitions and Concepts

In discussing difficulties defining Peer Tutoring, Topping (1996) argues that increased popularity of peer tutoring as a learning and teaching approach in Higher Education has resulted in it become increasingly difficult to conceptualise. Later

work by Topping (2005) also discusses the confusion between "tutoring" and "mentoring" and suggests that the literature compounds this confusion. Anderson & Boud (1988) also describe the complexities involved in defining peer learning and tutoring and argue that peer learning is a phenomenon in its own right that should be seen as separate from more formal methods of learning and teaching.

The confusion between "tutoring" and "mentoring" is evident across the literature. Topping and Ehly (2001) argue that such confusion is due to linguistic differences in different countries. They continue to argue that whilst the terms are often used synonomously in the US, mentoring differs from tutoring in that it can be defined as... *an encouraging and supportive one-to-one relationship with a more experienced worker (who is not a line manager) in a joint area of interest. It is characterized by positive role modeling, promoting raised aspirations, positive reinforcement, open-ended counseling, and joint problem solving* (Topping & Ehly, 2001, pp 116-117). Peer Tutoring on the other hand has a learning element characterised by '*... specific role taking: at any point someone has the "job" of tutor while the other (or others) are in role as tutee(s). It typically features high focus on curriculum content*' (Topping & Ehly, 2001, p 113). This perspective was later further developed by Topping who argued that Peer Tutoring involves... '*the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions. It involves people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by so doing*' (Topping, 2005, p 631).

Unlike traditional mentoring, which is generally conceived to encompass a supportive or developmental relationship, an important element of peer mentoring and tutoring is mutual learning. This perspective is supported by Anderson and Boud (1988) who contest that an important aspect of peer learning relationships is that they tend to be flexible in nature and involve students learning from each other whilst offering and receiving emotional support.

An alternative conceptualisation of peer learning is cooperative learning which is defined as working together in an interdependent manner in pursuit of specific shared goals or outputs (Slavin, 1990). Topping (2005) argues that cooperative learning involves '*the specification of goals, tasks, resources, roles, and rewards by*

the teacher, who facilitates or more firmly guides the interactive process. Typically operated in small groups of about six heterogeneous learners, CL often requires previous training to ensure equal participation and simultaneous interaction, synergy, and added value' (p 632). In considering cooperative learning, questions arise regarding as to whether this definition actually represents peer tutoring, indeed in many respects it would seem that cooperative learning is 'group-work'.

- **Typologies of Peer Tutoring and Learning**

The benefits of using a typology to conceptualise social phenomena is that such an approach provides a detailed explanation or depiction which usually incorporates the wider context. Two typologies of Peer Tutoring are proposed by Topping (1996, 2005). The first identifies the characteristics of Peer Tutoring (PT):

1. Curriculum content: PT may be knowledge or skills oriented, or a combination of both.

2. Contact constellation: Whereby one tutor works with a group of students (less common is peer tutoring in pairs).

3. Year of study: Tutors and tutees may be from the same, or different, year of study.

4. Ability: PT pay be offered on either a same-ability or cross-ability basis.

5. Role continuity: A structured switching of roles may occur as the roles of tutor and tutee may not be permanent.

6. Place: PT varies according to location.

7. Time: Scheduling for PT may be fixed or flexible.

8. Tutee characteristics: Tutoring may be targeted at specific groups of students based on ethnicity, race, gender, ability or other characteristic.

9. Tutor characteristics: May differ in terms of ability, age and other characteristics.

10. Objectives: PT project targets may differ in terms of intellectual gains, formal academic objectives, affective and attitudinal gains, individual social and emotional gains (Adapted from Topping, 1996, pp. 321-322).

A later typology devised by Topping (2005) describes thirteen organisational dimensions in which Peer Learning (PL) occurs:

1. Curriculum content: PL may focus on knowledge and / or skills.

2. Contact constellation: Refers to the size of the peer learning group which may vary from 2 to 30 or more.

3. Within or between institutions: PL usually takes place within a single organisation but can occur between organisations, such as between university students and school pupils.

4. Year of study: Tutors and tutees may be from the same or different years, and may be the same or different age.

5. Ability: Whilst most PL occurs on a cross-ability basis, there is increasing interest in same-ability tutoring (although concerns exist regarding 'meta-ignorance' when the tutor does not realise they do not know the facts).

6. Role continuity: Within PL there is the scope to exchange roles (reciprocal peer learning).

7. Time: PL may occur during regular lesson time or outside curricula hours. Depending on whether it is substitutional or supplementary for teaching (or both).

8. Place: The location for PL can vary greatly.

9. Helper characteristics: Depends upon the ability of the tutor. However, tutoring generally challenges both tutor and tutee.

10. Characteristics of the helped: Tutees may include a particular targeted sub-group including: the especially able or gifted, those with learning disabilities, those considered at risk of under-achievement, failure, or dropout, or those from ethnic, religious, linguistic, and other minorities.

11. Objectives: PL objectives may be based upon: intellectual (cognitive) crtierion; academic focused; achievement based; affective and / or attitudinal; socially and / or emotionally focused; related to self-image; organisational (reducing dropout, increasing access).

12. Voluntary or compulsory: PL may be a compulsory part of a programme or participation may be on a self-selecting, voluntary basis.

13. Reinforcement and rewards: Some PL projects require extrinsic reinforcement for the tutors, and some times tutees (payment, accreditation), while others rely on intrinsic motivation. (Adapted from Topping, 2005, pp 633-634).

Whilst both of these typologies provide a broad overview of the characteristics and features of peer tutoring they may criticised for lacking in depth and empirical grounding. The following section builds on the descriptive account given by Topping by discussing the wider context of Peer Tutoring in Higher Education.

- **Peer Assisted Learning**

Peer Assisted Learning (PAL) is defined as: *empowering students to take greater ownership and responsibility for their own learning. PAL sessions provide a setting for students to collaborate in discussing and solving problems, working through examples, reviewing the content of lectures and sharing lecture notes, identifying key issues, and anticipating and answering potential examination questions.* (Capstick & Fleming, 2002, 70). Whilst PAL enhances student learning by promoting a deep approach to learning in which individual students are able to develop high level cognitive skills, it also provides the medium through which students are able to develop as independent learners (Wallace, 1997).

In many respects PAL is viewed as cooperative learning in which students are encouraged to '...*take responsibility for their own learning which could lead to a greater involvement in the learning process thereby promoting learning through the interaction within discussion*' (Wallace, 1997, p 97). The cooperative nature of learning within the PAL model is also discussed by Congos & Schoeps (1998) who suggest that Peer Assisted Learning participants collaborated ... "... *to supply missing information or attempt solutions to problems as they help each other... Misconceptions, omissions, and ineffective problem solving mechanisms are discovered, corrections are attempted, and information about solutions exchanged among those present* (p 5). In helping students overcome misconceptions about learning, PAL may be viewed as a mechanism through which students 'make sense' of their work through the group abstraction of knowledge (Gibbs, 1990) and the development of critical thinking skills (Congos et al., 1997; Wilcox and Koehler, 1996).

Although much of the literature suggests that PAL does much to enhance 'higher order' skills, this view is not uncontested. Indeed, Capstick & Fleming (2002) suggest that there is little or no evidence to support this perspective and that such assertions

lack empirical grounding. Despite such doubts, research suggests PAL is used as a tool to aid retention or boost academic performance in many institutions (Blanc et al., 1983; Congos and Schoeps, 1993; Etter et al 2000; Kochenour et al., 1997).

To summarise, it would appear from the literature that peer assisted learning is a form of collaborative learning in which students are encouraged to make sense of their work through developing problem-solving and critical-thinking skills. Although there are some arguments to the contrary, it may be contested that, like other forms of peer tutoring, peer assisted learning promotes independent learning. However, the impact of this on deep learning has yet to be established.

- **Supplemental Instruction**

In the USA, reciprocal peer learning is often developed under the guise of 'supplemental instruction'. Manchester Community College (USA) defines Supplemental Instruction (SI) as '*an academic assistance program that utilizes peer-assisted study sessions. SI sessions are regularly-scheduled, informal review sessions in which students compare notes, discuss readings, develop organizational tools, and predict test items. Students learn how to integrate course content and study skills while working together.*' (Manchester Community College, 2008. www.mcc.commnet.edu). Supplemental Instruction travelled to Britain in the early 1990s via Kingston University and involves senior students working with their junior counterparts on subject specific work; it has been credited with supporting retention by helping students realise their potential through improving study skills (Wallace, 1992).

Research into the value of SI is discussed in the literature. Price & Rust (1995) investigated the use of supplemental instruction (SI) to support student learning on business modules at Oxford Brookes University. The intention of this project was to explore whether the SI process could also be used to provide additional support for students on very large introductory modules, especially in laying a firm foundation for later study in stage two of the course. Using a mixed methodological approach, data was collected and analysed in order to investigate the benefits of the scheme for students in both the short and long term. The findings suggest that attendance at some SI sessions has both an immediate effect in improving results, and also has

sustained and transferable benefits. However, Price & Rust argue that the long-term effects of SI appear to be limited by the context of the subject matter, the teaching approach, and/or the nature of the task and the skills required (1995).

The short-term impact of participation in SI was also discussed by Fayowski & MacMillan (2008) who utilised statistical analysis techniques to undertake a comparative analysis of the impact of SI on first year student assessment results. The study findings suggest that the odds for success are 2.7 times greater for the SI participants than for non SI participants (Fayowski & MacMillan; 2008).

Whilst it would seem that SI has an immediate pedagogic impact on student performance in terms of academic success doubts exist as to the academic validity of the manner in which such success is measured. Indeed, McCarthy et al (1997) argue that methods of assessing the effectiveness of Supplemental Instruction have not conclusively demonstrated whether or not it improves student performance in the university environment. They contest that analyses which show that students attending SI perform better academically than their counterparts fail to account for other factors which may affect academic performance. Such criticisms bring into question the validity of research into SI and similar programmes, the value of such programmes to individual students overall scholarly performance remains largely un-researched. Moreover, there is little doubt that it is a useful pedagogic tool which both supports and enhances student success.

- **Peer Tutoring and Mentoring in Higher Education**

Prior to examining the literature pertaining specifically to peer learning and support within **Higher Education**, it is necessary to first conceptualise the terms within the context of academia. Topping (1996) identified three types of tutoring in FE & HE:
1. Tutoring of students whereby mentoring forms workplace link (eg) educational programmes such as nursing)
2. Tutoring of trainees studying for a qualification
3. Tutoring comprising support for teaching staff (p 333)

The literature suggests that within higher education, peer mentoring and tutoring relationships are built upon equality in terms of 'power'. At its widest, peer mentoring

provides a wide range of support and consciousness-raising. By using reflection, mentors are able to challenge mentees' perspectives and deal with difficulties and challenges as they arise. Thus through consciousness-raising student mentors enable mentees to develop the *structural context* of academia (Cropper, 2000, p 603).

The cognitive processes involved within the peer tutoring relationship are explored in the literature with particular note being made of the value of questioning and verbalisation in promoting a successful peer tutoring experience (Durling & Schick, 1976; Bargh & Schul, 1980; Webb, 1982). Whilst mixed ability pairing is also discussed by Rosen et al (1977) who argue that pairing students with individuals of greater ability impacts positively on achievement of the tutees (fixed dyadic tutoring). An earlier study by Goldschmid & Goldschmid (1976) analyses the use of dyadic reciprocal peer tutoring in an undergraduate psychology module of 250 students. Evidence from this study suggests those involved in peer tutoring achieve higher results than those who do not (Goldschmid & Goldschmid, 1976). Whereas improved academic achievement is a key feature of peer tutoring within mixed ability pairings, it is not always that simple. Topping & Ehly (2001) discuss the outcomes of peer tutoring in same-ability pairings and argue that in such cases the emphasis shifts from the acquisition of basic skills shift to more complex and 'higher order skills' (Topping & Ehly, 2001). Whilst the impact on 'higher order skills' is difficult to measure, an experimental research approach adopted by Fantuzzo et al (1989) found that those students who had been involved in peer tutoring did better than those who had not. In addition to enhanced individual achievements one of the more important outcomes of peer tutoring is seen in the way individual students learn in that it encourages students to move beyond independent learning towards becoming interdependent learners (Boud, 1988).

The effectiveness of Peer Tutoring in enhancing student learning is investigated by Reid et al (1997) who analyse the value of triadic tutoring. Whilst a significant weakness of this study is that the tutoring to which it refers occurs in the presence of a lecturer, the findings do make a notable contribution to debates in this area. In addition to reducing lecturing time, Reid et al argue that peer tutoring increases deep learning and promotes transferable skills by encouraging students to work together in groups and consult the sources of material (1997).

A key advantage of peer tutoring is that it is reciprocal in nature. In discussing the pedagogical value of such reciprocity Anderson & Boud (1996) argue *'It is this type of mutual, complementary or reciprocal learning which, if properly managed, holds much potential for extending the range of learning activities. It offers a means of dealing with educational issues difficult to handle in other ways and of restoring and enhancing some of the social dimensions of learning frequently lost in universities of today'* (Anderson & Boud, 1996, p15).

It is the reciprocal nature of peer tutoring that is the common exemplar when conceptualising peer tutoring within the same paradigm as peer mentoring. Both phenomena involve students helping students. Whilst such help may be social or pedagogic in nature, the important factor is that it is underpinned by a mutually beneficial relationship.

In discussing mentoring within the Higher Education Sector in the USA, Jacobi (1991), notes that whilst mentoring has a long association with apprentice model of graduate education, it is increasingly used as a tool to promote undergraduate retention and enhance student studies. However, such growth has resulted in some concerns for Higher Education - the first of which is a lack of clear definition regarding exactly what constitutes mentoring within an educational setting. Jacobi (1991) argues that because there is no widely accepted operational definition of what mentoring actually is, there exists a vagueness and a lack of clarity about outcomes, antecedents, characteristics and mentoring relationships. Moreover, the lack of empirical evidence regarding the value of mentoring fails to support arguments that mentoring is linked to academic success.

In further developing this argument, Jacobi (1991) identified 5 components of the literature which she drew together to provide a framework within which mentoring may be, at least part way, defined within the context of higher education:

- *Mentoring relationships are helping relationships usually focused on achievement. The primary dynamic of the mentoring relationship is the assistance and support provided to the protégé by the mentor.*
- *Whereas the specific functions provided to protégés by mentors vary, mentoring includes any or all three broad components: (a) emotional*

and psychosocial support, (b) direct assistance with career and professional development, and (c) role modeling

- o *Mentoring relationships are reciprocal relationships. The mentor as well as the protégé derives benefits from the relationship, and these benefits may be either emotional or tangible in nature.*
- o *Mentoring relationships are personal… [ ] mentoring requires direct interaction between the mentor and protégé. While these relationships are not necessarily long term or intimate, they do involve an exchange of information beyond that available from public record documents*
- o *Relative to the protégés mentors show greater experience, influence, and achievement within a particular organization or environment* (p 513)

The reciprocal and mutually supportive nature of peer mentoring described by Jacobi (1991) is clearly distinguishable from the hierarchical relationships defined by Kram (1983) when discussing 'traditional' mentoring. Despite such differences, the functions of peer mentoring in higher education conceptualised by Jacobi (1991)[2] are similar to the supportive and career focused functions depicted earlier by Kram (1983)

- **The benefits of Peer Tutoring and Peer Mentoring in Higher Education for Student Participants**

The value of mentoring focused programmes for student mentees and mentors alike is widely discussed in the literature. Anderson & Boud (1996) argue that the main advantage of peer learning is the opportunity for students to learn from each other in a manner that is qualitatively different from formal university lecturing. Much of the literature suggests that participation in student mentoring increases independent learning for mentees and mentors alike (Jacobi, 1991; Topping, 1996) and results in positive learning outcomes for both (Astin, 1977; 1984; Hansford et al, 2002; Ehrich et al, 2004). Such learning outcomes include the enhancement of individual academic skills such as writing and study techniques (Fox & Stephenson, 2006); and

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[2] Jacobi (1991) identified three functions of mentoring in Higher Education: *a) emotional and psychological support, (b) direct assistance with career and professional development, and (c) role modeling* (1991, p 510).

the identification of career aims and help accessing work-related opportunities (Peyton, 2001).

Whilst the tangible benefits of participating in reciprocal peer learning or support programmes in terms of academic success represent a key benefit of mentoring or tutoring, a wider outcome of participation relates to transition into Higher Education. In discussing this issue Cropper (2000) argues that peer mentoring provides the means by which students are able to deal with difficulties associated with transition – particularly in relation to the perceived barriers and pressures faced by new students upon first entering academia (including feelings of isolation and otherness). Mentors have a significant role to play in helping new students overcome such barriers and integrate into the university setting (Cropper, 2000). Likewise, work conducted by Topping (1996) also draws attention to the benefits of peer tutoring in promoting the first year experience arguing that '...*students who regularly attended the peer tutoring sessions obtained significantly better feedback about improved transferable skills than those who did not. Additionally, student drop-out rates were lower in the [*peer tutored] *group than in the comparison year* (p 335).

The social value of the relationships formed as a result of participation in mentoring and tutoring (Eby et al, 2008) is key to the value of mentoring to the undergraduate student experience. One aspect of this is in the role played by mentoring in supporting students wishing to continue their studies at graduate level (see Erkut & Mokros, 1984, Keith-Spiegel & Wiederman, 2000; Landrum & Nelsen, 2002). In addition to this, mentoring is also valuable for those studying at graduate level ... '[a mentor] *provides the new* [graduate] *student with a certain sense of security by reducing the anxiety and apprehension that may occur, by providing accurate information concerning graduate education expectations, and by suggesting ways for making graduate education a positive and successful experience. Having a mentor allows the student to begin his or her graduate career in the right direction with well-thought out, yet flexible goals, and realistic expectations* (Peyton et al, 2001, 348). In many respects it seems that unlike mentoring programmes aimed at undergraduate students whereby the focus is on social support or academic success, mentoring at graduate level is more aligned to the psycho-social and career related outcomes of traditional mentoring identified by Kram (1983, 1985a, 1985b) as being prevalent in the workplace.

Unlike studies into traditional mentoring where the benefits for mentoring are discussed at great length, research focusing on the benefits of peer mentoring and peer tutoring for peer **mentors** and **tutors** within an academic setting is remarkably scarce. Two exceptions to this are Hartman (1990), who drew attention to the value of peer tutoring arguing that it provides the medium by which students are able to learn by teaching; and Cropper (2000) who pointed to the reflective element of mentoring suggesting that it helps mentors deal with their own subjectivities and can therefore be empowering (Cropper, 2000). The lack of literature in this area suggests there is much room for further investigation into the wider benefits of peer mentoring and tutoring in Higher Education from the perspectives of the peer mentor or tutor.

Conversely, previous research into mentoring and tutoring in Higher Education has identified several organisational benefits of introducing such programmes. In discussing the institutional benefits of peer mentoring, Sanchez et al (2006) argue that within the university setting, it is possible that serving as a peer mentor may result in increased commitment to the university and to student's degree area. This in itself aids individual student development and directly impacts transition and graduation rates. Furthermore, HEIs benefit from peer mentoring programmes because mentoring represents a low cost, low-intervention model of student support (Sanchez et al, 2006).

- **The Challenges of Peer Mentoring and Tutoring in Higher Education**

One of the main challenges associated with peer mentoring in academia reflects unsuitable pairings. This is particularly the case where weak students are paired with other weak students resulting in little or negative pedagogical impact (Topping, 1996). Another difficulty associated with the nature of the mentoring / tutoring relationship and the academic 'strength' of mentoring partners was highlighted by Fox & Stephenson (2006) who drew attention to issues around trust and confidence – pointing out that difficulties arise when students lack confidence in the quality of their partners work within a peer tutoring setting.

Across all Higher Educational mentoring settings one of the main challenges reflects the academic, social and personal boundaries between mentor and mentee. In discussing this, Anderson & Shore (2008) argue that despite the fact that the boundaries may be indistinguishable at times (ie differences between academic advising, career counselling, and emotional support may become blurred), it is the mentors responsibility to maintain clear academic and personal boundaries between themselves and the mentee (for further details see Bowman et al, 1995; Plaut, 1993).

From an institutional perspective, far more challenges are described in the literature than benefits. A cautionary note is given by Topping (1996) who argues that the '*dual requirement to improve teaching quality while 'doing more with less' has recently increased interest in peer tutoring in higher and further education ... it would be unwise to seize upon peer tutoring as a universal, undifferentiated and instant panacea*' (Topping, 1996, p 321). Disadvantages of peer tutoring for HEIs are described by Topping who argues that the design and development of peer tutoring programmes is expensive in terms of staff time, training and support cost. Furthermore, there is always a danger that the quality of peer tutoring may be low (1996, p 325). Issues around resources are also raised by Cropper (2000) who argues that resource management (financial and staffing) represents one of the major challenges of providing a mentoring programme within HE. Other difficulties reflect problems with time-management (mentors and mentees); early withdrawal from the scheme without having fully utilised it; the breakdown of mentoring relationships (for further details see Cropper, 2000, p 604).

It would seem from the literature that the benefits and challenges of formal peer mentoring and tutoring programmes in Higher Education reflect those evident in traditional mentoring in other organisations. Thus, the benefits of peer mentoring and tutoring tend to be individually experienced by student participants; and the main challenges of peer mentoring and tutoring programmes generally reflect organisational and institutional concerns.

Discussion & Questions for Future Research

This review commences by discussing difficulties in conceptualising *traditional* mentoring. However, whilst the concept of mentoring remains somewhat disputed, by drawing together the various arguments it is possible to define traditional mentoring thus: **a dyadic relationship in which a senior or more experienced individual (the mentor) offers career and psychosocial support to a less experienced or junior colleague (the protégé or mentee).** From a career focused perspective, such support may encapsulate: assistance and advice with occupationally focused issues through the development of work related skills and competencies; access to career-related networks; identification of career related opportunities. Psychosocial support may include: counselling; befriending; listening; and offering personal advice and support.

Similar difficulties are raised in respect of conceptualising and defining peer mentoring within a higher education setting. Indeed, various terminologies are used interchangeably within the literature including: peer mentoring; peer guiding; peer advising; peer support; peer tutoring; peer learning; peer assisted learning; and supplemental instruction. The diversity in terminologies reflects the different activities brought together under the wider heading of mutual support, or alternatively students helping students.

Bringing together the various perspectives in the literature a formal definition of reciprocal peer learning and support in Higher Education is proposed ... **Reciprocal Peer Learning and Support involves an educationally focused relationship in which students support each other either academically or socially (or both) for a set period of time.** It should be acknowledged that this is not intended to capture the complexities of the various activities undertaken within the remit of peer mentoring and peer tutoring, but instead has been formulated as a 'benchmarking' statement – upon which an empirically grounded typology of reciprocal peer learning and support may be built using the Pathways to Success study findings.

From a research perspective, the complexities of issues surrounding the wider student experience indicates a need for in-depth, qualitative research in order to gain

a depth of understanding about the individual and institutional benefits, and challenges, of peer mentoring and peer tutoring within higher education (Woodd, 1997). However, in addition to qualitative research, it is important that certain aspects of peer mentoring and peer tutoring be quantifiably measured and analysed. In discussing student mentoring in Higher Education, Jacobi (1991), raises two important questions:

1. *What is the prevalence of mentoring in Higher Education?*

2. *What are the empirical links between mentoring and academic success?*

Currently there is no empirical evidence regarding the prevalence of mentoring in Higher Education across the UK. This issue will be addressed by the Pathways to Success Project by means of a Content Analysis of peer mentoring and peer tutoring programmes offered across the UK Higher Education Sector.

In drawing together the extant literature pertaining to peer mentoring and peer tutoring, this review has enabled the identification of key 'gaps' within the literature. The following questions, relating specifically to peer mentoring and tutoring in higher education have emerged:

1. How can peer mentoring and peer tutoring be conceptualised for the purposes of empirical research?

2. What is the nature and prevalence of peer mentoring and peer tutoring programmes across the UK HE?

3. How can the impact of peer mentoring and peer tutoring be analysed and measured in terms of student retention?

4. What is the pedagogic value and impact of peer mentoring and peer tutoring in higher education?

5. How do peer mentoring and peer tutoring programmes enhance students' experiences in respect of integration into higher education?

6. How do students' experiences of peer mentoring and peer tutoring compare across different institutions?

-   Do students from non-traditional backgrounds (including disabled, mature, Black and Minority-Ethnic and overseas students) experience similar pedagogical and social outcomes from participation in peer mentoring and peer tutoring within and across institutions?

7. How do staff perceptions of peer mentoring and peer tutoring programmes compare across different institutions?

8. What are the particular challenges and benefits of developing, administering and managing reciprocal peer learning programmes within and across the partner institutions?

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