

Thanaraj, Ann (2017) Constructive reflection: getting the best out of reflective learning. *International Journal for Innovation Education and Research*, 5 (2). pp. 40-60.

Downloaded from: <http://insight.cumbria.ac.uk/2715/>

*Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.*

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

**provided that**

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
  - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

**You may not**

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing [insight@cumbria.ac.uk](mailto:insight@cumbria.ac.uk).

# ‘Constructive reflection’

## Getting the best out of reflective learning

**Ann Thanaraj**  
University of Cumbria, UK

### **Abstract**

*This paper proposes a constructive reflective model that offers learners a layered and developmental approach to embed learning and the application of learning within the seemingly constantly changing professional environment which requires flexibility and empowerment to be a key feature in the curriculum students are offered. The model is different from other popular reflective practice frameworks because it embraces the influences of personal epistemology of assumptions and consciousness and recognises how our identity, values, opinion and experiences impacts on the way we react or behave in particular situations. It builds on models which embed opportunities for exploring personal epistemology within one’s learning and judgement. It recognises the need to facilitate the reconceptualization of knowledge and learning by questioning, evaluating and critique of knowledge to draw higher levels of cognitive and moral development, whilst it aims to explicitly raise awareness of the necessary competent knowable, skills and attributes for professional practice through its constructive and methodological process. This leads to a holistic and effective professional learning process, one that allows for flexible gradueness in students.*

**Keywords:** Reflective practice, Constructive reflection, Epistemology, Consciousness, Identity and values, Professionalism, Knowledge trajectory, Contextual learning, Professional development

### **Introduction**

This paper seeks to create a structured and constructive reflection model as a guide for learners to undertake reflective learning. The model is different from other popular frameworks for reflective practice because it builds on the personal epistemological influences and sits alongside those models which offer the space and scope for evaluating the influence of personal epistemology on the act of learning the learning process, development of learners, judgement skills and the way one views knowledge (Casey, 2014, Perry 1970, Magolda, 1992) in the learning process and guides the questioning, evaluation and critique of an experience to facilitate a higher level of a learner’s cognitive and moral development, whilst explicitly raising awareness of the necessary learnable skills and attributes for competent professional practice through its structured, guided and methodological process. It is intended that by following the structured reflective process, a learner will have the opportunity to become reflexive, to question and challenge their ways of practice and implement and evaluate initiatives to effect change.

The design of this framework stems from a number of motivations. My own experience of reflection as part of my training as an academic started off as being descriptive; focusing on what I have done, what I should have done, identifying the gaps and action planning. Based upon the literature I read, I could see there was strong pedagogic potential for reflecting and this newly-found awareness made me realise that I wasn't analysing my own thought processes or actions on a sufficiently deep level to be able to improve my level of competency and practice in present and future situations. I realised that by deepening my level of analysis and thought I would be able to question and critique my current thinking, become more aware of assumptions and preconceptions and gain the confidence needed to take on new approaches to practice (Vygotsky & Vygotsky 1980). I began to create a checklist to help me question deeply and explore my thoughts more analytically. The items for reflecting on the checklist evolved after each reflective experience and overtime I settled with seven key features for effective reflection.

Another key motivating factor is the strong impetus within legal education to embed reflection into the law curriculum as a learning and assessment tool (Stuckey et.al, 2007). The 2013 Legal Education and Training Review in England and Wales requires that law programmes provide opportunities for student reflection (LETR, 2013). Prior to this, the Carnegie Foundation's Educating Lawyers in the US in 2007 called for a more integrated law school curriculum that would combine both formal knowledge and the experience of practice by building practical skills and reflecting on professional responsibility as missing pieces of legal education (Carnegie Foundation, 2007). Furthermore, the Solicitors Regulation Authority's (SRA) Competence Statement of 2015 defines the standard of service to clients in England and Wales and within this is an expectation for practicing and trainee solicitors to consider their strengths and weaknesses and determine their professional development needs.

I have successfully integrated reflective learning practices into the law curriculum at the University. This was achieved through a number of modules and in particular in the new Virtual Law Clinic (VLC), a practice simulation tool to enable law learners to gain experience of real-world law transactions and a realistic view of the emerging trends in the legal profession (Thanaraj & Sales, 2015). The VLC allows learners to build a working relationship with a client, exercise their problem solving abilities and establish an acceptable level of professionalism. Aside from this, learners gain an understanding of appropriate data handling and security practices and experience of web-based practice management applications.

At the end of a lawyering transaction, the intended learning outcomes of the VLC curriculum and experience gained from working on the VLC are conceptualised into learning by way of reflection (Boud, 2000; Fook, 1999b, 2004d). Learners are expected to reflect in detail on their performance in the context of professional development of the skills, knowledge and attributes of a modern and digitally competent lawyer and show an understanding and appreciation of a range of ethical considerations relevant to legal practice (Moon, 1999; JISC, 2011; Barry, Camp, Johnson & Klein, 2012). The reflection takes place after key milestones, for example, after a fact-finding interview, after an advice interview, after an out of court settlement, after the completion of a case. Students are encouraged to express themselves and their own

ways of enacting a lawyering skill. As such, students will need to explore good practice and ways of addressing and handling information from clients and other stakeholders and then make informed and researched choices (Casey, 2014) which will influence their way of performing a task.

However, there were a number of challenges with taking part in reflection. When the word ‘reflection’ is mentioned, there is an assumption of what it is – exploring or thinking and writing about something which has been undertaken. This assumption can lead to describing an event or task in an unreflective or superficial manner (Bengtsson 1995; Bleakley 1999, as what I had initially done when I began to reflect on my academic practice. Furthermore, despite consulting the theoretical frameworks there is little clarity on the cognitive and philosophical methods and attitudes of reflection (Van Rossum & Hamer (2010) so as to pinpoint the key factors which draw out deep consciousness to rationalise an activity undertaken. From my review, there is also little literature which works out a structured and meaningful method of carrying out reflection.

From my own experience of growing as a reflective practitioner in academia and from assessing varying quality of reflections, I created what I call a ‘constructive reflection’ model – this is where the reflection process is undertaken in a structured and layered manner – a step by step method which builds from descriptive based knowledge to a higher cognitive development to learn, improve and develop professionally. The word ‘constructive’ has been used to acknowledge that new knowledge and meaning is created from a learner’s experience in an actual professional workplace or through active and immersive-designed learning activities (Piaget 1990, 1994). Within this experience, by creating space and opportunity for learners to assess, explore and evaluate their own learning, the reflective learning process helps a learner to bridge their understanding between theory and practice, challenge the concepts and theories, develop new skills, new attitudes and new ways of thinking through reconceptualising knowledge and renewing their identity and values (Finlay and Gough, 2003).

As such, this paper shares the constructive reflective model and the framework and intended learning around the model. The model utilizes the influence of epistemology and the theory of cognition in reflective practice, built from the work already done by key leaders in the field such as the works of Casey (2014), Perry (1970), and Magolda (1992). The premise of my work to date suggests that any initiatives which are embedded into curriculum, whatever the drive for enhanced student learning and academic experience, none of these would materialise and meet the desired outcome without the space and structure created for learners’ to undertake timely and constructive reflection.

## **A missing dimension in reflection: The influence of personal epistemology in reflective learning and evaluation**

Reflective practice is seen as the cornerstone to effective professional learning because of its potential to promote the development of autonomous, self-directed, and responsible professionals (Hofer, 2000,

2004a). I would submit that it also has the potential of creating a responsible citizen and gradueness with self-awareness for improvement, creativity and dedication to the wider society.

Education literature dating back to the early twentieth century discusses the benefits of reflective learning. First instigated by Dewey (1933), his constructivist interpretation of reflective learning is an '*...the active, persistent and careful consideration of any belief or supposed form of knowledge...*' (p.118). In order to reach the full learning benefits of reflection, Dewey's interpretation requires the reflection process to be undertaken continuously (p.39), methodologically and rigorously to make new meaning (p.74). Accordingly, he advocates that if undertaken well, reflective learning allows the learner to build their knowledge each time they move from one experience to another, such as with a higher order of learning, deeper understanding of each experience and its connections to other experiences and ideas (p.119) and the possibility of personal, moral, emotional and intellectual awareness and growth (p.99).

Another helpful interpretation of reflection was from Boyd and Fales (1983) who explained that reflective learning is the '*...process of internally examining and exploring...which creates and clarifies meaning... results in a changed conceptual perspective*' (p.100). Interestingly, this interpretation focuses on the process of cognitive and experiential examination, questioning and rethinking of the dominant, taken-for-granted epistemological assumptions of knowledge (Fook, White and Gardner, 2006). The intended outcome of this process is a conscious renewed meaning and reconstructed knowledge which can be applied to new experiences.

Building upon Dewey's (1933) constructivist interpretation and Boyd and Fales' (1983) internalization to challenge meaning, Schön's (1983, 1987, 1991) leading literature specific to the context of improving professional learning created a method in which learning can take place in action and on action. He explains that reflection is a methodology of learning which involves a continuous iterative '*dialogue of thinking and doing through which I become . . . more skilful*' (p.31). He explains that through this dialogic process, a learner has the opportunity to review past experiences whilst consciously evaluating the way in which one's practices, conduct, personal epistemology, assumptions, and values, actions, and responses had impacted the experience. It also allows consideration for other ways of doing things differently, building understanding of existing theory and being able to customize its use in different professional settings. Schön's (1991) explains that the awareness gained from the dialogue and conscious evaluation, can lead to improvement to performance and a higher level of understanding.

This deeply internalized process of reflection has the potential to draw out an 'attitudinal shift' (Brookfield, 2000) through the transformation or reaffirmation of one's beliefs, attitudes, opinion, and emotional and epistemic reactions, in turn creating new meaning and knowledge. The new knowledge can be assimilated into tacit knowledge and previous experiences, developing new outlooks, rethinking what were once misunderstandings, and evaluating what is important, ultimately altering one's perceptions. On the other hand, the new meaning may help to reframe and transform existing knowledge and interpretation (Hofer &

Pintrich, 1997).

#### Epistemological influences in reflection

A person's epistemology determines their approach to learning and development. Individual epistemology encompasses the values, assumptions and preconceived notions a person may possess about knowledge and the means upon which it is acquired (Brownlee et al., 2011). As such, some awareness of defining personal epistemology is helpful especially in understanding the how it could influence one's learning practices, professional practice and more importantly one's decision making thought processes. In order to develop a reflective learning model which can be designed to bring out many of the potential benefits of reflection, as proposed in this paper, it is helpful allow a learner's epistemic stance to be explored, allowing a learner to become conscious about how their perceptions, assumptions and values may influence their reasoning, actions, responses and decision making skills (Hofer & Pintrich, 1997; Brownlee, et al., 2011).

Reflective learning which has been designed to raise awareness and consciousness of one's epistemic stance can help to reconceptualise the learning process. Within the context of professional learning, these developments together with an established or renewed epistemic stance may influence how a learners' thinking processes, moral reasoning, professional judgement skills, taking a holistic view and being open to new perspectives (Fook, 2000, 2004a; Mezirow and associates, 2000).

The works of Perry (1970), King and Kitchener (1994), Vermetten, Vermunt, & Lodewijks (1999) and Magolda (1992) are helpful in illustrating the learning trajectory which learners go through in developing the ability to critically think, evaluate and reflect.

Perry's (1970) longitude study took place in Harvard University for a period of four years in which he investigated how learners learn using interview techniques. In particular, his focus was on the progress and development of their learning and the relationship between the student and how they acquire and retain knowledge. The study found that at the start of their course learners adhered to knowledge from their tutors and their research materials as absolute. Learners also held beliefs of certainly of knowledge which was either deemed to be correct or incorrect in a given situation. Half way into their studies, there was a shift in the way learners viewed knowledge.

Being able to hold views from multiple perspectives enabled learners to become aware of and understand conflicting views in different contexts. However, it was also evident that learners still believed that there is a specific correct piece of knowledge for a given situation. As the learners approached the completion of their studies, there was evidence of relativism to knowledge. Learners had the ability to use universal principles to weigh competing interests, making and evaluating flexibly held beliefs and values whilst exercising abstract thinking using reason and enquiry.

Similarly, Vermetten, Vermunt, & Lodewijks' longitude study (1999) with a broad spectrum of learners

from social science, economics, law and arts learners in a Dutch university found early on during a study programme learners undertake surface learning. This changes to deep learning as learners' progress through their course of study. The authors argue that the epistemic stance of learners influences their learning styles. The depth of learning adopted by learners hinged upon their view of knowledge. Those who were accepting of knowledge being fluid and constantly developing learned at a deeper level, whereas others who simply accepted knowledge at face value utilised the surface learning approach.

Another study which set out to explore how learners develop their knowledge and the relationship between acquired knowledge and how it is utilized to solve problems was undertaken by King and Kitchener (1994). Their study found that epistemic assumptions, and therefore the certainty of knowledge is capable of change (p.10). This finding is a similar reflection of Perry's (1970) and Vermetten, Vermunt, & Lodewijks' (1999) findings whereby over time the way knowledge is perceived and utilized goes through a development trajectory of change. Using this finding of capable epistemic change, King and Kitchener (1994) went on to develop a reflective model mapping out how knowledge is developed. Similar to Perry's (1970) model, it begins with a pre-reflective state where the conception of knowledge is perceived as absolute where no challenge to what is known takes place. Next is a quasi-reflective state where knowledge begins to be seen as perhaps uncertain and ambiguous and capable of being challenged by personal opinion or other perspectives. Finally, the learners embark on the reflective stage where a knowledge is questioned, evaluated and then accepted taking into account a wider worldly perspective.

The most prominent framework on the conceptions of knowledge is by Magolda (1992). Knowledge is seen as fixed or certain or absolute - essentially taking in knowledge without applying a deeper level of critical thought or questioning of the subject matter. The next phase is where a student reaches the transitional stage, which is where knowledge is no longer fixed, they acknowledge the uncertainty in what they have learned and an awareness and need for understanding emerges, rather than simply memorisation of the topic. With tutor support at this stage directing learners to how knowledge can be malleable and applicable in different situations, a learner's knowledge is now linked to their personal values and beliefs. By applying a deeper level of thought and analysis and through the use of evidence a learner will gain the confidence to know when it is appropriate to use specific knowledge. At this stage a tutor is viewed as a purveyor of ideas and viewpoints, whereas the learner is a constructor of knowledge.

In analysing the models presented above, it appears that the manner in which knowledge is created, interpreted and applied is interchangeable from absolute to pluralistic to contextual depending on a number of factors. A brief synthesis of the studies reviewed above show that the factors which may influence the transition of how knowledge is perceived may be due to:

- The learner's ability to relate to the context of the knowledge
- Prior experience possessed by the student within a particular discipline
- Amount of previous experience gained in the subject area
- The learner's perceptions, assumptions, beliefs and values

As such, dependent upon context and application, learners may perceive acquired knowledge as static and unchanging, or as dynamic, questionable and evolving. The acquisition of knowledge and knowing can come from multiple-sources including one's own opinion and observations. As such, one's epistemological beliefs develop and change over time. Despite identifying the value and impact of epistemological beliefs in the knowledge process the existing models of reflection and reflective practice are excellent tools for use in curriculum to assist learners to undertake reflections, the models do not take into consideration the underlying personal epistemic stance of a learner or facilitate the opportunity for assumptions and preconceptions to be drawn out, questioned and critiqued in order to develop critical consciousness (Brookfield, 2000, 1995).

### **A proposal for a constructive reflective model**

This paper proposes a constructive reflective model will offer a layered approach which helps to build the trajectory of a learner's journey in professional practice. The intention of the reflective model is to embed learning and the application of learning within the seemingly constantly changing professional environment by raising awareness of assumptions, diverse views and opinions, identifying one's approach to learning and knowledge, power and socio-political impact.

The proposal for a constructive reflective model takes into consideration the existing frameworks which are most popularly used in the education paradigm: Kolb's (1984) learning cycle where reflection is seen as the glue which helps to recognise situations where abstract concepts can be applied (p.38); Gibb's (1988) straightforward stages of reflective cycle considers feelings, experience, and takes into consideration multiple perspectives to find suitable solutions for future transactions; Johns' (2002) model of structured reflection encourages the use of dialogue and supervision to develop an epistemological understanding of reflection; and Rolfe et. al.'s (2001) framework for reflexive practice uses the 'what? so what? and now what?' questions to construct theories of how to deal with similar situations in the future. The guide follows Casey's (2014) 'stages of reflection' method to offer structured guidance to support students in a process which could be unfamiliar to them, but also to offer them support in the way of critical and deeper thinking through suggested broad prompts throughout the process.

In adaptation from Casey (2014), Perry (1970)... and using my own checklist created from personal experience of reflection, this model embeds seven layers of learning development by way of reflection, based upon analysing the beliefs, values, perceptions and assumptions of learners and practitioners in order to appreciate different ways of viewing knowledge, skills and attributes. This consequently raises awareness of a learner's reasoning, cognitive and moral development and allows reflection to be made in action during the experience and after the event (Schön 1991) to continually build learner's self-improvement, improve decision making and judgement skills and attitudes necessary for a professionally responsible lawyer. Most importantly, the final stage – Feedback – is most crucial to ensure that the conceptualised learning (stage 6) meets the required standards of competency and professionalism,



taking into account the needs of the professional codes, an appreciation of one's own way of enacting an act and the needs and expectation of the society.

Building upon the premise of the existing models, it strives to offer a way forward for deep reflective learning to help a learner develop into a competent practitioner and professional by encouraging a holistic understanding of the world and identify ways of working together. In doing so, it is anticipated that a learner's previously compartmentalised ways of thinking and practice will be transformed enabling new ways of working and knowing to emerge (Finlay and Gough (2003).

## **A constructive reflective model for use in legal and professional education**

### **Introductory phase for tutors**

From my own experience of teaching, it appears that initially learners are unfamiliar with what is required when asked to reflect on a task or skill undertaken. It is good practice to begin with the basics - by explaining what is meant by reflection. For example, in synthesizing the literature on reflection discussed earlier, a simple definition would be that reflection is a thinking process which is continuously and methodological that examines and explores an action, a task or an idea to evaluate and attach new meaning. A detailed discussion around the key focus of reflection using a definition is helpful as a starting point.

To introduce learners to 'how to reflect', 'trailing out' exercise where learners are asked to discuss their experience on a particular topic in small groups on topics such as exam grades, work experience/summer jobs, holidays and so on – something that everyone can relate to. The process of reflection is the key here and tutors could discuss the different ways students had undertaken their reflection, what worked, didn't work and highlight some good practice. From a constructivist's perspective, this pool of multiple observations and ideas help learners to generate new knowledge.

Another challenge is the use of the word 'I' is an exception to most advice on good academic writing practice. In order to help learners understand the value of personalisation in their learning and thinking process, we hold a discussion around 'knowledge', how it is created and the role of one's epistemic stance. This helps address the importance of the first person in reflection. This will help learners see the difference between academic writing and reflective writing, and perhaps even the value of 'I' in discovering themselves and their identity through the process of reflective learning.

Examples of reflective writing – those that are deemed to be effective (critical, clear though process, structured, analytical of multiple perspectives, identifies impact of own values) and those deemed to be not so effective (descriptive, little future thought on improvement, little awareness on multiplicity of knowledge and skills) helps illustrate what had been discussed collectively. I encourage my students to draw up a list of criteria which make up a good piece of reflection. This is used together with the model presented below to help generate high quality, deep and conscious constructive reflection.

Finally, a consolidation is helpful for learners to share their interpretation and conceptions of reflection and reflective learning. This is also the stage where I introduce students to the constructive reflection model (a practical adaptation of Casey's (2014)) and the importance of addressing personal epistemology in learning, especially in a professional context.

### **1. Understanding competency and professional standards**

Learner begins by narrating with thick description about their experience of undertaking a professional transaction

The narration is set out quite simply to describes what happened, usually chronologically setting out the activities as they unfolded. There is little by way of discussion. This acts as the backdrop to develop deeper levels of reflection as the learner works through each of the steps proposed. Some narrations can show some evidence of deeper levels of consideration such as any emotional reactions, however at this stage there is little by way of multiple perspectives and alternative viewpoints which may challenge the learner.

- Detailed description of events
- What was my role in this event?
- How did I prepare for it?
- How did I work with others to meet the goal of the event?
- How do I feel the event went?
- How did I perform?

Learner identifies competency of lawyering or professional skill

By building on the tacit knowledge gained from lessons, reading of practice guides, observing others and from prior experience, the learner is expected to identify what it means to be competent in relation to a professional skill. This may require the learner to undertake further reading and research on the professional standard of competence. The aim is for the learner to become familiar with the competent standard of a professional and be able to articulate and interpret with understanding what the level of competency is.

- What resources have I been provided with on this activity?
- What other research have I undertaken to prepare for this activity?
- Are there any codes of conduct/professional regulations to adhere to?
- What are my interpretations of these rules/good practice?
- Do I understand what these mean?
- What are my views about the research and guides which are meant to help me prepare for an activity/event?

Learner evaluates their competency

The learner is expected to demonstrate elements of stepping back from events and actions to observe the

actions and decisions exercised. The learner needs to undertake a comparative study into their performance as set out in the competency standards. Here learners could be asked to describe the standard of competence for a skill or action being reflected on and then to apply that standard to their performance.

Building on knowing what a competent lawyer/professional will do in a given situation of exercising a particular skill or undertaking an activity, the questions to address here are:

- Using the resources and research undertaken to prepare for an activity/event, to what extent did I feel I utilized what I know?
- What does competency mean to me?
- Do I feel that I have achieved a level that I can describe as competent for the activity I have completed?
- Do I feel that I have achieved a level that I can describe as competent for the various skills/components of that activity?
- To what extent were my actions in measure with the standard of competency?

In order to address these questions fully, learners are expected to give consideration to their decision making process and their level of knowledge about the skill and corresponding facts at the time of undertaking the activity. Reflection and evaluation at this stage should demonstrate some evidence of analytical and integrative perspectives.

Learner identifies gaps in their competency

The overarching theme of this phase of reflection is to gauge what would be necessary to achieve a basic level of competence in the performance. Once the process of evaluation of individual performance against the standard of competency is completed, the learner will be able to generate a higher level of inquiry about what is known and what is unknown with the aim of formulating an action plan to bridge this gap.

The learner undergoes a process of deep reflection at this stage where there is self-questioning/internal dialogue deliberating on improvement and development, taking into account the perspectives of competency and what this means or may look like. There is evidence of standing back and evaluating, learning from experience and the need for bridging the gap between what is already known, how to improve what is already known and learning what is unknown. There may also be some evidence of a learner perhaps moving away from an absolute and fixed conception of knowledge.

In order to focus on identifying gaps in knowledge, the following questions could be of help:

- Drawing upon the evaluation above, what are the strengths and weaknesses
- Is there room for improvement within areas of strength identified - If so, what? how?
- Break down the areas of weaknesses and tackle what the problems are - knowledge, technical skills or 'soft' skills/behaviours?
- If so, what knowledge, skills or behaviours were lacking?
- What do I need to do to get to where I need to be – here set out the actions and goals to achieve.

Through this process the learner would build upon their knowledge of professional competency by developing new knowledge and a deeper understanding of law through problem solving, research and analysis in an independent and self-directed manner to improve judgement and reasoning skills.

## **2. Awareness of multiplicity of worldviews for knowledge construction**

Building on the rich identification of professional competency of a particular skill or task, a learner become aware of the variety of different ways in which a task can be handled professionally and competently. With knowledge about these new ways of working, a learner will need to consider which method of working are most suited to them, taking into account the task at hand, the impact of the task, their confidence and level of understanding of each choice and the consequence of choosing one way of working over another.

- Am I aware of the different ways in which to conduct/perform this activity?
- What does the literature and professional codes say about how to perform this activity?
- What method did I choose?
- What influenced my choice?
- How did my own perception and my own way of doing things influence my decision?
- Are there any benefits to the way I undertook the activity?
- Are there any drawbacks?
- If I was to do this again, what will I do differently and why?
- How do I feel about knowing the various ways in which to perform on activity?
- To what extent do I value uniformity in conduct/performance?
- Do I see value in being allowed to form my own professional action?

The learner's own analysis of their conscious or subconscious decision-making will help to bring out aspects of professional values and professional identity because of the learner's shift from adhering to one prescribed competency to evaluating and deciding upon one themselves. Over time when the learner interprets and implements the chosen competency, there will be elements of the learner's own professional identity and personal standards utilised.

It is at this stage, where the learner undergoes a process of deep reflecting, self-questioning/internal dialogue deliberating on the different ways in which professionalism and competency can be achieved. Perhaps there may have been prior experiences which could have influenced the learner's decision making, or the learner's personal frame of reference to learning could have played a part.

The reflection that takes place is now located within a wider and broader set of perspectives and there is realisation that there is no one absolute way of task action, instead there are multiple different ways of working. The learner may begin to question their thinking process, what motivates their decision making and what needs to change to adopt new or different practices. It is also here where a learner may start to question their personal conceptions and beliefs in the hope of achieving the lawyering skills needed to work competently and professionally for their clients. The extent of the reflection as to why a particular choice of

working was made will require further investigation.

### **3. Putting the 'I' into reflecting: Exploring one's epistemic influence** (Casey, 2014)

At this stage, the learner's values and identity become the focus of the reflection. It is an opportunity to explore the reasons for their decision making, what empowers and motivates them to adopt one form of working over another. This analysis will require the learner to confront their epistemological stance on learning, on lawyering, on professionalism, on skills and aptitudes needed in the workplace and it sets out to identify the epistemic factors such as assumptions, characteristics, experiences, preferences and viewpoints to explain the what, how and why of the learner's professional decision-making process. This part of the reflection aims to facilitate the realisation of the power of how one's personal values, emotion and beliefs can influence a decision. This can be explored more broadly in the context of upholding justice, serving a client's needs and developing one's professional responsibility and identity.

Noting that this is not an exhaustive list, here are some guiding questions to raise self-awareness and realisation of one's epistemology which may give rise to more questions for reflection:

- What does learning mean to me?
- How do I believe knowledge is formed?
- Do I prefer to work along or in groups?
- Can I learn effectively by myself or in groups?
- What am I good at?
- What do I need to improve on?
- What professional experiences have I had before?
- Can I use what I have learn in a work context to the activity I am undertaking?
- What aspects of my values determine how I perform something?
- What do I understand about professionalism?
- How does professionalism apply within the context of lawyering?
- Do I contradict my values and beliefs with the way in which I implement professionalism?
- What influences my actions?
- To what extent does someone else's perception of me influence how I act?
- Why did I choose to act in a particular way?
- What would have made me act differently/make a different choice within the context of this reflection?

During this process of internalising, exploring and examining one's own beliefs, emotion and values, the learner undergoes a process of deep reflection, self-questioning/internal dialogue deliberating on improvements, different views, perhaps even the view of others. There may be reflection on professional responsibility and what this means and a recognition of how prior experience, thoughts and beliefs could shape and affect meeting the standards required. Over time it is possible for a learner's personal epistemological stance to change due to a growth in self-awareness. This sees a shift in opinions from static to dynamic and a broader more open-minded outlook on challenging opinions and perspectives.

#### **4. Social influence to judgement skills and task performance**

Within the law curriculum, this is an opportunity for the learner to focus on the concepts of justice, rule of law, respect and equality. The obligation of a lawyer's role is varied and requires an understanding and maintenance of the highest standards of ethical conduct. The level of professional competency, responsibility and ethical conduct and character needs to be upheld. In order to ensure this, being reflective and responsible about own behaviours and actions can help to ensure continuous self-improvement, integrity and sensitivity towards clients and others, making decisions that are just, fair and ethical. The concept of professionalism however encourages the desire to do better and continually improve, maintaining the respect and confidence from others in the profession and the society. The practice of law is deeply embedded within society and as such it is useful for learner's to consider the ways in which law has helped shape our society.

Having identified one's personal identity, it is helpful at this stage to consider the factors which may influence decision making, ways in which multiple perspectives and stakeholder needs are considered and how tasks are completed and the way a learner conducts themselves in a professional setting is regulated by their subject-related professional codes of conduct including specifics of professional responsibility and ethics. Professional codes of conduct are crucial to meeting the required competency standards of any profession.

- How important are professional codes of conduct?
- How do I go about interpreting the use of these codes?
- Are the codes by themselves helpful in conducting a lawyering activity?
- What are research/resources are needed to conduct a lawyering activity?
- How have I used the professional codes in my activity?
- Could I be considered to be competent?
- What are my social values and views?
- Am I sensitive to liberal or conservative ideas and in what ways?
- How does my knowledge about our social norms in society and in the profession influence the way I undertake a lawyering skill?

The wider external influences can develop personal values and identity, demonstrating an awareness of how others may perceive an action, and more so towards the values and behaviours of professional responsibility which may influence how better to perform on a task. It is possibly at this stage where the learner's professional identity begins to flourish through the exploration of reactions may relate to their decision, ideas are questioned and considered using multiple perspectives.

#### **5. Cultural, political and economic influence in exercising professional judgement**

At this stage, learners are required to consider their actions, decisions and epistemological stance and the impact of these within the wider perspectives of power and governance, culture, religion and legal awareness within day to day life. Through undertaking a much broader reflection, this will help learners

develop a critical awareness of the interplay between societal, political, cultural, economic and religious influences in policy and law. It also creates an opportunity for learners to evaluate their current practice in light of these theoretical considerations, whilst being able to offer reasoned and justifiable opinions on the effectiveness of specific laws, the desirability of reform and to recognise and understand competing arguments for reform.

- Am I aware of the cultural, political and economic affairs of my jurisdiction?
- How do I keep up to date?
- What are my views on the norms of our society?
- To what extent am I comfortable with the norms of our society?
- How does my knowledge about our cultural norms in society and in the profession influence the way I undertake a lawyering skill?
- How does my knowledge about our political norms in society and in the profession influence the way I undertake a lawyering skill?
- How does my knowledge about our economic norms in society and in the profession influence the way I undertake a lawyering skill?
- How do I view myself when speaking/advising a client/the other side?
- What do I understand by the notion of power? Do I exercise power over an activity or someone?

This deeper level of understanding and reasoning will be of assistance developing professional responsibility and judgement skills. Further, a learner's awareness and knowledge transits from concrete levels of understanding to more abstract understanding of law, the lawyering process, professionalism and its significance in society.

## **6. Conceptualising learning: Putting it all together**

Here learners engage in critical thinking that is purposeful, reasoned and goal oriented by synthesising, evaluating and demonstrating an awareness of how they came to acquire their knowledge of ways of working within the context of the reflection undertaken, why they have made certain decisions, and their own process of learning. Learners' problem solving approaches are questioned and reviewed along with the rationale behind selecting these strategies for particular tasks.

- What task(s) have I undertaken?
- What did I learn?
- Is there a better way of performing the task? (re-evaluating the multiple perspectives)
- Why? (re-evaluating reasoning and decision making)
- How will I achieve this improvement? (re-evaluating and future planning)
- What is that I didn't know before reflection that I know now?
- What have I learnt about myself?
- If I have discovered something new/different/unfamiliar about myself, do I want to make any changes or do I wish to embrace this new awareness?
- How do I view the society we live and work in?

- To what extent does the cultural, political and economic situation of our society influence the way I act and what I believe in?
- Can I confidently explain who I am at the end of this process?

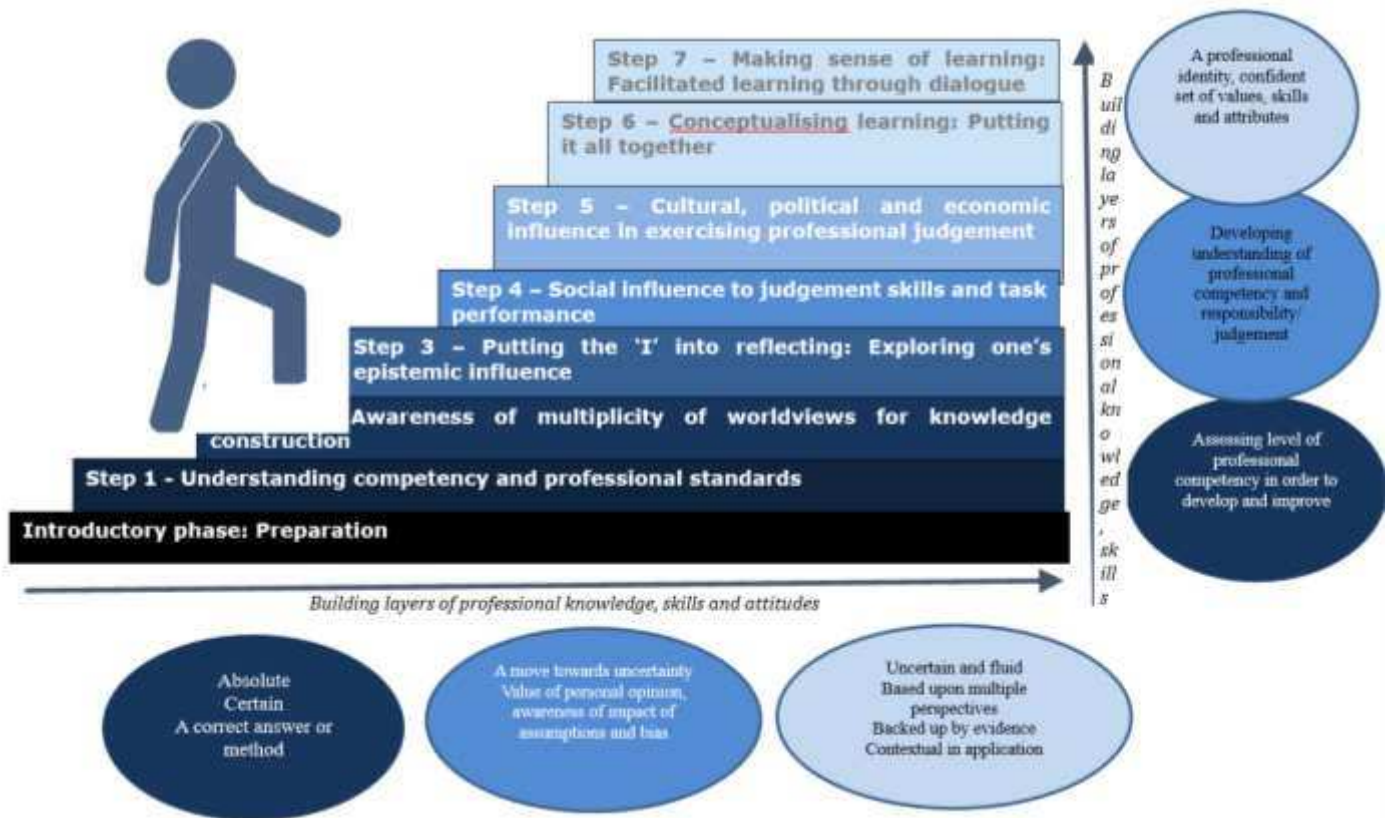
Learners will also be able to review their epistemic thinking about attitudes, beliefs, and emotions, identifying any changes or reaffirmation of beliefs, providing reasons for this. There is also development of cognition where learners are now in a position to make informed and well-reasoned connections to previous knowledge, experiences and utilize this effectively in new experiences, modifying knowledge to fit the context of application and accommodating new ideas at the same time. This helps to improve and integrate one's professional identity and autonomy and creates a sense of ownership of learning.

### **7. Making sense of learning: Facilitated learning through dialogue**

Once learners have been able to put their learning together, they need to be able to make sense of their new or different knowledge. To create meaning and make sense of the learning, it is helpful for learners to have individual and/or group conversations with a supervisor or more experienced professional for feedback. It is also an opportunity for the learner to gain some practical and professional insights into their new understanding and appreciation for the matter that was reflected upon. Through a dialogue, a learner and the expert/supervisor/tutor would be able to review the gaps in the competencies and review the action plan set out by the learner to address areas of improvement. This constructive process allows for competency to be developed and learned while evaluating how practices could be improved through expert tips and techniques. It is an opportunity for the learner to discuss areas that require improvement, develop a clearer understanding of what elements of the competency are deficit and feedback on tackling the improvements. This has worked very well for my students as a last step in creating that necessary understanding of the learning process which they have undertaken.



Figure 1: An illustration of the reflective learning model and its associated learning outcomes



### The intended learning outcomes of the proposed constructive reflective model

The proposed reflective model offers a layers and structured process of drawing out awareness and consciousness of a learner’s appreciation for professional competency skills, the development of judgement and decision-making skills and consequently their professional identity. The model has a built-in measure to critically enquire one’s epistemic consciousness is one of the most important factors in leading a holistic and effective professional learning process.

The model has been designed to provide opportunities for the following intended learning:

- To gain insights about a learner’s strengths and weaknesses through self-evaluation
- To think more deeply about the step-by-step action and thinking undertaken to complete a task
- To consolidate and evaluate knowledge by identifying the extent and manner in which knowledge is applied in a professional or experiential setting.
- To question and unpack difficult concepts and its relevance in different professional situations
- To seek continuous self and professional improvement on competency of skill, technique, and expertise
- To question and critique what is known to be absolute. This could lead to developing new and varying professional knowledge, improved critical thinking and evaluation of existing practice
- To question and critique personal assumptions about practice and becoming aware of its impact on professional practice with a view to making the necessary changes for optimum competency
- To use experience gained in practice in order to continuously develop and improve upon knowledge

and skills through the use of critical thinking, analysis and review. In addition, forming connections between previously learned concepts and theory and discovering where gaps exist in the understanding of theory and identifying the necessary steps required in order to improve professional competency.

- To build a capacity for improved professionalism by questioning and identifying one's personal values, a philosophy of practice, emotional intelligence, ongoing ethical and moral development, self-awareness, self-direction and self-discipline
- To enhance performance within professional practice by forming new insights and opinions into approaches to lawyering by questioning established assumptions and beliefs.
- To continuously improve upon reasoning and judgement skills by questioning, analysis and reviewing of actions taken.
- To learn directly from professional practice in action by reviewing actions in the midst of their performance with the ability to make constant adjustments as we undertake an action, facilitate the development of continuing improvements in quality.
- To take appropriate action based on the momentum created by that reflection by setting goals and objectives with measures by being self-aware and self-directed to improve practice. This practice becomes a way of being for optimum professional competency
- To be client-focused and practice-ready

This model demonstrates that reflection is more than simply thinking and describing an event. It requires some recognition of our identity, values, opinion and experiences and their impact on the way we react or behave in particular situations. The impact of personal consciousness and epistemology has a significant impact on how we view learning, knowledge, professionalism and others around us. As such, the model develops a learner's reflection in a holistic process of continual improvement, continual exploration, continual changes and adaptation. The layers within the model can be applied in-action when exercising a particular skill or decision-making and of-action thinking about an activity, evaluating its success and forming ways of improving.

## **Conclusion**

This paper proposes a constructive reflective model that offers learners a layered and developmental approach to embed learning and the application of learning within the seemingly constantly changing professional environment. The model embraces the influences of personal epistemology of assumptions and consciousness and recognises how our identity, values, opinion and experiences impacts on the way we react or behave in particular situations.

It is hoped that the internalized process of reflection will help to draw out an 'attitudinal shift' (Brookfield, 1987) so that learners are encouraged to consider their epistemic stance in detail, questioning and reviewing how this impacts on their learning, practical skills and decision-making skills, with the opportunity to reframe and develop new perspective or reaffirm their beliefs.

Focusing on a person's beliefs, values and perceptions is a key aspect of personal development through reflection. A person's epistemic position shapes their attitude, thought processes and approach taken to reasoning, judgement and problem solving, as well as their view of others. Reflection opens up a new dimension to a learner or practitioner whereby they consider new ideas and opinions on particular issues.

Further, the popular frameworks used in the education sector shows that the manner in which knowledge is created, interpreted and applied is interchangeable from absolute to pluralistic to contextual depending upon a learner's previous experience and level of existing knowledge; the specific context the knowledge is described and implemented within; and the learner's current epistemic stance.

The structured process of the outlined reflective model steers learners towards a broader way of thinking through personal evaluation of their knowledge and its implementation reconceptualise knowledge and learning by questioning, evaluating and critique of knowledge to draw higher levels of cognitive and moral development, whilst it aims to explicitly raise awareness of the necessary competent knowable, skills and attributes for professional practice through its constructive and methodological process.

This leads to a holistic and effective professional learning process.

The proposed constructive reflection model demonstrates that reflection is more than simply thinking and describing an event. It requires some recognition of how our identity, values, opinion and experiences and its impact on the way we react or behave in particular situations. The impact of personal consciousness and epistemology has a significant impact on how we view learning, knowledge, professionalism and others around us.

In order to effectively undertake the process, set out in the proposed constructive reflective model, tutors are advised to undertake some preparatory work with learners first.

Preparation tips:

- Explaining what is reflection.
- Put it into practice - learners to discuss one prescribed activity or experience in a small group
- Class discussion about the benefits of talking about an experience
- Comparison of thinking process and multiple observations of the same experience
- Discussion around what is knowledge and how it is created
- Encouragement to use first person speech
- Introducing examples of reflection
- Learners to *utilize examples of reflection to draw out helpful criteria of do's and don'ts' of successful reflections*
- Learners to be encouraged to share their interpretation and conceptions of reflection and reflective learning.

- Tutors to introduce some literature on reflective learning, conceptualising learners' *viewpoints* and experiences
- Draw out its relevance in a professional context

#### Understanding competency and professional standards

- Learner begins by narrating with thick description about their experience of undertaking a professional transaction
  - Learner identifies competency of lawyering or professional skill
  - Learner evaluates their competency
  - Learner identifies gaps in their competency

#### Awareness of multiplicity of worldviews for knowledge construction

- Learner is confronted with different ways of completing a professional task or achieving a particular goal
- Learner is expected to consider and confront the factors which influenced their choice of method employed to complete a task/make a decision
- Learner to become more conscious and aware of their own values and identity both professionally and personally as they move from adhering to prescribed methods of functioning to making decisions on what suits them and their practice best
- Learner may begin to question about their thinking process, motivations, areas for improvement
- Learner to become aware and begin questioning their personal conceptions and beliefs and the impact this has on learning and professional conduct
- Learner becomes open to multiple perspectives; realisation that knowledge is not always certain; it is open to diverse options and perspectives

#### Putting the 'I' into reflecting: Exploring one's epistemic influence

- Learner may have become aware of some personal conceptions, assumptions and bias from the process above
- Learner to realise the power of their own epistemic stance, values, emotion and beliefs and its impact on decision-making. Learner undergoes a process of deep reflecting of self-questioning/internal dialogue
- Learner to consider how their epistemic stance shapes and affects their professional responsibility
- Learner becomes aware that their personal frame of reference is capable of change through this process
- Learner appreciates that knowledge and application of knowledge can be interpreted within the context of *one's personal opinion*.

#### Social influence to judgement skills and task performance

- Learner to make a conscious effort to learn about the roles, character and expectations of a competent

lawyer

- Learner to consider own behaviours and actions in light of these expectations questioning and seeking improvement
- Learner has the opportunity to develop personal values and identity which may influence how better to perform on a task.

Cultural, political and economic influence in exercising professional judgement

- Learners to appreciate the role and context in which their decision making can influence and impact the wider society
- Learners have the opportunity to develop critical awareness of the interplay between societal, political, cultural, economic and religious influences in policy and law.
- Learners to evaluate their opinion, assumptions and practice in light of these theoretical considerations
- Learners develop improved reasoning and decision-making skills
- Learners improve their level of competency and responsibility/judgement skills
- Learners view knowledge in a more abstracted based on needs and evidence within the context of its application.

Conceptualising learning: Putting it all together

- Learners engage in critical thinking about the process undertaken
- Learners consider what has changed and what has remained the same through this process – knowledge, application of knowledge, assumptions, personal views and epistemic stance, level of competence, responsibility, identity as a professional
- Learners to develop reasons to articulate their own professional practice

Making sense of learning: Facilitated learning through dialogue

- Learner engages in a conversation with an expert professional
- Learner to gain practical and professional insights
- Learner to develop a clearer understanding of the gaps in their skills and aptitudes to help with action planning

## **Reference list**

Barry, M. M., Camp, A. R., Johnson, M. E., & Klein, C. F. (2011-2012). Teaching Social Justice Lawyering: Systematically including Community Legal Education in Law School Clinics. *Clinical Law Review* 18(2), 401-458. Available at:

<http://scholarship.law.edu/cgi/viewcontent.cgi?article=1011&context=scholar>

Bengtsson J. (1995) What is reflection? On reflection in the teaching profession and teacher education. *Teachers and Teaching: Theory and Practice*, 1(1), 23–32.

Bleakley A. (1999) From reflective practice to holistic reflexivity. *Studies in Higher Education*, 24(3), 315–330. Access available at:

<http://srhe.tandfonline.com/doi/abs/10.1080/03075079912331379925>

Brownlee, J., Petriwsky, A., Thorpe, K., Stacey, P., & Gibson, M. (2011). Changing personal epistemologies in early childhood pre-service teachers using an integrated teaching program. *Higher Education Research and Development*, 30, 477-490. Access available at:

<http://www.tandfonline.com/doi/abs/10.1080/07294360.2010.518952>

Boud, D. (2000) 'Sustainable assessment: rethinking assessment for a learning society', *Studies in Continuing Education*, vol. 22, no. 2, pp. 151\_167. Available at:

<https://www.uts.edu.au/sites/default/files/davidboudKeynote.pdf>

Brookfield, S. (1995) *Becoming a Critically Reflective Teacher*, Jossey-Bass, San Francisco, CA.

Brookfield, S.D. (2000) Transformative learning as ideology critique, in J. Mezirow and associates (eds) *Learning as Transformation*. San Francisco: Jossey-Bass.

Boud, D. and Fales, A. (1983) Reflective learning: key to learning from experience. *Journal of Humanistic Psychology*, 23(2), 99-117.

Carnegie Foundation (2007) *Educating lawyers: Preparation for the profession of law*. Available at:

[http://archive.carnegiefoundation.org/pdfs/elibrary/elibrary\\_pdf\\_632.pdf](http://archive.carnegiefoundation.org/pdfs/elibrary/elibrary_pdf_632.pdf)

Dewey, J. (1933), *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*, DC Heath and Company, Lexington, MA.

Dewey J. (1938a) *Experience and Education*. Collier Books, New York.

Finlay, L. and Gough, B. (2003) *Reflexivity: a practical guide for researchers in health and social sciences*. Oxford: Blackwell Publishing

Fook, J. (1999b) Reflexivity as method, in J. Daly, A. Kellehear and E. Willis (eds) *Annual Review of Health Social Sciences*, 9: 11–20. Access available at:

<http://www.tandfonline.com/doi/abs/10.5172/hesr.1999.9.1.11?journalCode=rhsr19>

Fook, J. (2000) The lone crusader: constructing enemies and allies in the workplace, in L. Napier and J. Fook (eds) *Breakthroughs in Practice: Social Workers Theorise Critical Moments*. London: Whiting & Birch

Fook, J. (2004d) The transformative possibilities of critical reflection, in L. Davies and P. Leonard (eds) *Scepticism/Emancipation: Social Work in a Corporate Era*. Avebury: Ashgate, 16–30

Fook, J., White, S.A. and Gardner, F. (2006) Critical reflection: a review of contemporary literature and understandings, in S. White, J. Fook and F. Gardner (eds) *Critical Reflection in Health and Social Care*. London: Open University Press. Available at:

<https://www.mheducation.co.uk/openup/chapters/0335218784.pdf>

Gibbs, G. (1998), *Learning by Doing: a Guide to Teaching and Learning Methods*, Further Education Unit, London.

Hatton, N., & Smith, D. (2006). *Reflection in Teacher Education: towards Definition and Implementation*. Australia: Sydney University, School of Teaching and Curriculum Studies. Available at: <http://alex.edfac.usyd.edu.au/LocalResource/originals/hatto-nart.rtf>>

- Hofer, B. K. (2000). Dimensionality and disciplinary differences in personal epistemology. *Contemporary Educational Psychology*, 25, 378-405. Access available at: <https://www.ncbi.nlm.nih.gov/pubmed/11001783>
- Hofer, B. K. (2004a) Introduction: Paradigmatic Approaches to Personal Epistemology. *Educational Psychologist*, 39, 1-4. Access available at: [http://www.tandfonline.com/doi/abs/10.1207/s15326985ep3901\\_1?journalCode=hedp20](http://www.tandfonline.com/doi/abs/10.1207/s15326985ep3901_1?journalCode=hedp20)
- Hofer, B. K. & Pintrich, P. R. (1997) The Development of Epistemological Theories: Beliefs about Knowledge and Knowing and Their Relation to Learning. *Review of Educational Research*, 67, 88-140. Available at: <http://cedu.niu.edu/~walker/research/Epistemological%20Theories.pdf>
- Johns, C. (2002) *Guided Reflection*. Oxford: Blackwell Science
- JISC. (2011) *Developing Digital Literacies: Briefing Paper in support of JISC Grant Funding 4/11*, Available at: <https://www.webarchive.org.uk/wayback/archive/20140616150918/http://www.jisc.ac.uk/media/documents/funding/2011/04/Briefingpaper.pdf>
- King, P. M. & Kitchener, K. S. (2004) *Reflective Judgment: Theory and Research on the Development of Epistemic Assumptions Through Adulthood*. *Educational Psychologist*, 39, 5-18. Access available at: [https://www.researchgate.net/publication/247522681\\_Reflective\\_Judgment\\_Theory\\_and\\_Research\\_on\\_the\\_Development\\_of\\_Epistemic\\_Assumptions\\_Through\\_Adulthood](https://www.researchgate.net/publication/247522681_Reflective_Judgment_Theory_and_Research_on_the_Development_of_Epistemic_Assumptions_Through_Adulthood)
- Kolb, D. A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*, Prentice Hall, London.
- The Legal Education and Training Review (2013) available at: <http://www.letr.org.uk/the-report/>
- Magolda, B.M, (1992) *Knowing and Reasoning in College - Gender-related patterns in intellectual development*, Jossey-Bass, San Francisco. Access available at: <https://eric.ed.gov/?id=ED350947>
- Mezirow, J. and associates (2000) *Learning as Transformation: Critical Perspectives on a Theory in Progress*. San Francisco: Jossey-Bass
- Moon, J. (1999) *Reflection in Learning and Professional Development: Theory and Practice*. London: Kogan Page.
- Perry, W. G. (1970) *Forms of Intellectual and Ethical Development in the College Years*, New York, Holt, Rinehart and Wilson.
- Piaget, J. (1990). *The child's conception of the world*. New York: Littlefield Adams.
- Piaget J (1994). *Cognitive Development in children: Piaget Development and Learning*, J. Res. in Sci. Teaching, 1964, 2: 176-186
- Rolfe, G., Freshwater, D.A. and Jasper, M. (2001) *Critical Reflection for Nursing and the Helping Professions: A User's Guide*. Basingstoke: Palgrave.
- Schon, D. A. (1991) *Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning in the Professions*, Jossey-Bass, San Francisco, CA

Schon, D.A. (1983) *The Reflective Practitioner: How Professionals Think in Action*. USA: Basic Books.

Schon, D.A. (1987) *Educating the Critically Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*. San Francisco: Jossey-Bass.

Solicitors Regulation Authority's (SRA) Competence Statement of 2015

<http://www.sra.org.uk/solicitors/competence-statement.page>

Stuckey, R. T., Barry, M., Dinerstein, R. B., Dubin, J. C., Engler, R., Elson, J. S., .Schwartz, M. H. (2007). *Best practices for legal education: A vision and a road map*. Columbia, South Carolina.

Available at: [http://www.cleaweb.org/Resources/Documents/best\\_practices-full.pdf](http://www.cleaweb.org/Resources/Documents/best_practices-full.pdf)

Thanaraj, Ann and Sales, Michael (2015) *Lawyering in a digital age: A practice report on the design of a virtual law clinic at Cumbria*. *International Journal of Clinical Legal Education*, 22 (3). pp. 334-361. Available at:

<http://journals.northumbria.ac.uk/index.php/ijcle/article/view/471>

Van Rossum, E. J., & Hamer, R. (2010). *The meaning of learning and knowing*. Rotterdam: Sense Publishers. Available at:

<https://www.sensepublishers.com/media/1113-the-meaning-of-learning-and-knowing.pdf>

Vermetten, Y. J., Vermunt, J. D., & Lodewijks, H. G. (1999). *A longitudinal perspective on learning strategies in higher education: Different viewpoints towards development*. *British Journal of Educational Psychology*, 69, 221–242. Access available at:

<http://onlinelibrary.wiley.com/doi/10.1348/000709999157699/abstract>

Vygotsky, L., & Vygotsky, S. (1980). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.