Improving Learning Through Reflection

Prof. Sushila Chaudhary
Principal, Saraswati College Of Education Panipat Haryana

Abstract:
Education is the essence of every civilization. It is through the process of educating future generations that we enter the realm of teaching and learning. The teacher plays a crucial role in the educative process, serving as the key figure and the most important element in the system.
This paper emphasizes the process of learning rather than individual learners. Constructivism holds that all knowledge is constructed based on the learner's pre-existing knowledge. This perspective advocates that learning is an active mental process rather than passive reception. According to J. S. Bruner, cognitivism emphasizes discovery-based learning and problem-solving methods. Constructivist teachers encourage cognitive conflict through skilled questioning, a process known as critical exploration.
Furthermore, this paper critiques traditional teaching methods and argues that instruction should focus on teaching students how to learn rather than merely transmitting knowledge. It is crucial for educators to embrace constructivist principles to enhance the learning process.
Additionally, this paper discusses the teacher's role in promoting constructivist learning. The authors explore the concept of constructivism and advocate for a learner-centered, activity-oriented, and interactive pedagogical approach to curriculum design.
Keywords: *Education, Teaching and Learning, Constructivism, Cognitive*

Research into student learning has provided significant insights into learning styles, motivation, and approaches. Empirical evidence supports what our instincts tell us: we learn by doing, through experience, and by trial and error. This process allows us to learn from our mistakes.

In Western culture, phrases such as "That'll teach you" or "You'll learn" are common reprimands when experience highlights our errors. However, we often discuss these learning conditions as though experience alone leads to better comprehension or improved ability. In reality, what transforms experience into understanding is **reflection**.

Repetition and practice aid learning, but they do not replace the importance of **actively thinking** about past experiences—evaluating what we did well and what needs improvement. A simple prompt question like, "What might I do better next time?" or "What could I do differently?" enables us to reflect on our past and present actions, ultimately guiding us toward a better future. This reflective process is vital in higher education and plays a crucial role in shaping lifelong learners.

I. Definition Of Reflection

What do we mean by reflection in an educational sense? Phil Race (2002) states:

"The act of reflecting is one which causes us to make sense of what we've learned, why we learned it, and how that particular increment of learning took place. Moreover, reflection is about linking one increment of learning to the wider perspective of learning—heading towards seeing the bigger picture.

II. Reflection As A Structure For Learning

We might think of learning as a network of co-existing ideas (Moon, 1999). Learners construct their own meaning, with abstraction drawing on both their cognitive skills (reasoning, knowledge) and metacognitive skills (imitation, self-awareness). When new stimuli are experienced, the learner re-evaluates prior knowledge and tries to make a connection into the existing cognitive or metacognitive network of ideas. The process of reflection provides a structure for these connections.

Reflection can be supplemented materially by helping the individual make connections between theory and constructs they have learned formally. Using driving as an example, the driver becomes more accomplished as they make connections between the learning theory and the Highway Code, mediated by the driving instructor and the process of observing, storing, and modifying awareness.

Reflection can also enhance an individual's understanding by providing a structured framework in which they can 'unpack' an experience and consider the implications of what has happened. Extending this analogy, we see that car insurance claim forms require drivers to answer prompt questions such as, *"How could the accident have been avoided?"* In this and many other learning contexts, we might not always like what we find when we reflect, since blame is often as much a test of judgment (e.g., the accident could have been avoided by noting the distance between my car and the one I reversed into). The structure of reflection helps us to deconstruct an event and find an explanation for what happened. Structures in the form of prompt questions help students to reflect and to make sense of their understanding.

III.   Reflection As A Method For Developing Deep Learning

Reflection is a way of maximizing deep learning and minimizing surface approaches. As Moon neatly highlights, the very language involved in reflection correlates with a deep approach. In its use of words and phrases such as 'relating ideas,' 'looking for patterns,' 'checking,' and 'examining cautiously and critically,' it implies the involvement of reflective activity in the process of learning.

"Reflection transforms what may have appeared to be acceptable situations into problems requiring further investigation by demanding a resolution to conflict or an answer to a question." In this way, learners move beyond passive assimilation of mediated knowledge and into the realm of inquiry and complex situations.

In his much-cited work, Kolb (1984) refers to these problematic areas as the 'swamps' of professional practice in which learners have to cope with ill-structured situations. Reflection also aids deep learning by promoting independent thought. The fact that so many professional learning contexts require learners to provide evidence of their reflection, whether through a learning journal, personal development portfolio, or video, means that students have to focus their thoughts and articulate either verbally or in written form the outcomes of their reflection.

Expressing reflections demands a 'voice' by which to express thoughts, and inevitably, this increases confidence and self-awareness in ability. Reflection aids not only deep learning of a particular subject matter but also the development of metacognitive skills.

The following statements from students are typical of those who have been involved in reflection:
"I think it's very useful. It certainly helped me in the first weeks when I had no confidence, and I didn't know where I was."
"Writing it all down gave me confidence in what I was doing."
"You usually concentrate on the negative things, and you don't think about the positive things. The learning logs force you to reflect on the positive." (Hinnet, 1997)

Seeing progress charted on paper also increases motivation to continue the learning journey toward a successful and personally satisfactory conclusion.

Alverno College in the USA operates a system where students are constantly engaged in self- and peer-assessment and accept that making judgments about their own work is part of college education. During interviews, final-year students commented:
"I like the self-assessment because I can reflect back and know I should study more in this area. If I can't come up with a self-assessment, that means I wasn't really focusing on the question, and that's something I have to leave and go back and strengthen."

Another more humorous student noted:
"It's painful, but the more painful it is, the more I learn." (Hinnet, 1997)

These benefits of reflection as a structured technique assist self- and peer-assessment, helping students develop interpersonal skills, improve confidence, and sustain motivation for their studies by taking responsibility for their own development.

IV.   Providing Evidence Of Reflection And Skill Development

Pedagogic research has done much to persuade us of the value of teaching methods that support deep learning. In the context of a government commitment to lifelong learning, this enthusiasm for independent learning emerges as a license to include reflective practice within the higher education curriculum. The Skills Plus project has identified subject understanding, social practices (skills), efficacy beliefs and self-theories and metacognition (reflection) as being central to the concept of employability. Knight (2002) argues that the concept of transferable skills is misleading since transfer requires what he calls 'meta-cognitive fluency'. In other words, individuals need to be aware of how and why they learn before they can apply learning to different contexts. In this sense reflection acts as a personal interpreter of experiences, filtering out what is relevant and what is not and making connections with existing beliefs and knowledge. Perry's work back in 1970 highlighted different types of students: those who actively seek cues about how to be successful in learning and those who are oblivious to

such aids (what Perry in those days termed the 'cue-deaf). Extrapolating from those findings it is possible that there are students who, consciously or otherwise, ignore the benefits of reflection and rely on surface approaches to learning. Resilience, resourcefulness and reflection, says Guy Claxton, are the three key conditions for lifelong learning (Claxton, 1999).

V. Professional Practice

Professional practitioners such as lawyers, medics, dentists, social workers, and architects have a particular interest in the use of reflection as a way of developing professional conduct. Speaking about the discipline of law, Macfarlane suggests:

"A reflective model encourages the development of both cognitive and affective theories of moral and ethical behaviour, challenging students to integrate these into their personal belief systems as a result of their experiences instead of (at best) passively absorbing the 'rules' of professional conduct."
(Macfarlane, 1998)

Learning about professional conduct and working with clients in different situations requires a particular flexibility of mind and range of responses. In his seminal work, Schön (1983) refers to the uncertainty, uniqueness, and conflict inherent in professional practice. He claims that if you are dealing with a unique situation in which the boundaries are likely to change, it is not possible to apply standard categories of analysis and action. There is a need for alternative strategies to engage with the situation. This is where Schön's now infamous terminology— 'swamps' and 'high ground'—comes into operation. He explains that certain fixed situations can be approached by applying technical knowledge and skill, which represents the high ground. By contrast, the unique and changing situation of a case or a client's requirements is 'swampy.' By this, he refers to the 'messy,' subjective process of thinking about what you know and attempting to find solutions to problems.

He speaks of 'reflection-in-action,' which may be interpreted as a body of personal knowledge that is implicit in one's 'feel' for the subject. Reflection involves tacit knowledge, 'gut' instinct, and 'guild' knowledge about what is valued in a particular discipline. An example of this might be the way a student approaches an oral presentation for the first time. Ideally, the student will have researched the content, planned a structure using visual aids, and paid attention to the timing. This is the framework of the presentation. However, once performing, the student will draw on a personal bank of knowledge to supplement the argument. He or she will also tap into feelings about how well they are performing and may even deviate from the prepared script to illustrate a point.

This reflection takes place during the action itself. It requires an awareness of context and the ability to evaluate progress during the course of the action. It is what we colloquially call 'thinking on your feet.'

VI. The Reflective, Affective Learner

Reflection is about more than cognitive skills such as 'how?' and 'when?'—it also deals with the 'why?' Students need to make sense of and appreciate beliefs, values, understandings, and perceptions. In considering what it is that we know and what we don't know, we are likely to face inevitable doubts and feelings of inadequacy. Admitting that we don't know something is embarrassing, particularly in front of peers, but it is necessary that we attend to these feelings in order to move on.

The 'affective domain,' as it is commonly termed, *"... involves the study of emotions: how they are expressed, how they are learned, how they are experienced consciously and unconsciously, how they influence and are influenced by behavior, and how they relate to other vital human characteristics, such as intelligence, language, reason, and morality."* (Price, 1998)

Emotion is important to learning because it affects motivation and our ability to understand what we experience. Learning requires an appreciation of how you learn best, and what Goleman (1996) refers to as emotional intelligence. Learning also requires an awareness of tacit and shared behavior and is a combination of personal and social skills. This is learned knowledge that involves tacit, intuitive thinking.

As Schön (1983) points out, reflection describes *"the competence by which we perform our work but are unable to describe what it is that we do."* This is not because our vocabulary is lacking or because semantics make precision difficult, but because much of this knowledge is deeply embedded in our cognitive and emotional processes.

A brief analysis of law program designers reveals that growth and creativity objectives are often compromised at the expense of content. Questions such as "How much?" and "What does the student know about X?" guide programmed design. Boud and Walker (1998) argue that "it is common for reflection to be treated as if it were an intellectual exercise—a simple matter of thinking rigorously." However, reflection is not solely a cognitive process; emotions are central to all learning. Helping students acknowledge and make use of their intuition and tap into their emotional responses is at the heart of reflective practice.

Claxton (1999) refers to intuition as a "loose-knit family" of ways of knowing, which are less articulate and explicit than normal reasoning and discourse. Encouraging students to articulate their feelings about learning helps them come to terms with their strengths and weaknesses. Reflective journals are one way of introducing

students to the idea of reflection on practice and making their intuition explicit. Many law schools employ this approach both as a formative tool and as a form of assessment.

At the University of Central England, students have the opportunity to undertake a voluntary placement working at a law firm in the US. They are expected to conduct themselves as professional lawyers. Their experience is captured as a reflective diary, which forms part of the assessment for the unit. One student reflected on his development of communication skills while on placement:

"I had some advocacy experience on the course; however, this is still different from court advocacy. Representing real people on issues that were still very new to me reinforced the need for adaptability in court, allowing me to think on my feet. There is no comparison between the mock courtroom, where you are fighting for a good grade, and an actual court, where you are fighting for someone's life."

(Placement journal from a second-year LLB student, UCE, Birmingham).

Clearly, the experience is beneficial to students as they learn that the law is a complex subject, steeped not only in principles and case law but also in the lives and experiences of real people. One of the biggest challenges in supporting experiential and problem-based learning is how to tap into students' different learning styles and self-image. Whether students are studying law as an academic subject or training for practice, extending their repertoire of experiences means they have more opportunities to utilize their knowledge, experience, and affective capacities.

Works Cited

[1]   Boud, D (1995) Enhancing Learning Through Self-Assessment (London: Kogan Page)
[2]   Boud, D And Walker, D (1998) 'Promoting Reflection In Professional Courses: The Challenge Of Context', Studies In Higher Education 23(2), 191-206
[3]   Claxton, G (1999) Wise Up: The Challenge Of Lifelong Learning (London: Bloomsbury)