

# Teaching and learning in social science and humanities: A cognitive-affective approach to tertiary teaching

**Barnaby Pace** BSocSc(Hons), MSocSc(Hons), PGDipCogBehavTher, MNZPsS  
School of Education and Social Development. WINTEC, Thames  
barnaby.pace@wintec.ac.nz

**Abstract:** This paper will provide an overview of the author's own model and approach to tertiary teaching in the arena of social sciences and development. The model will be discussed within the context of the teaching environment and show its relationship to current industry practice. The proposed model can be aligned to humanistic adult education as suggested by humanistic psychologists Maslow and Rogers. The humanistic adult education approach is concerned with the development of the individual as a whole, with particular emphasis placed on emotional and affective characteristics. Within the realm of social science and humanities, students are required to learn more than a series of theories and facts that they can then apply to real world experiences. They are also required to bring a humanitarian element to their practice. For this reason emphasis needs to also be placed on affective learning as well as the cognitive approach of acquiring knowledge. As such affective learning and reflection on one's own life experiences are critical for the development of such skills as social reasoning and problem solving. The cognitive-affective approach therefore provides the philosophical foundation from which tertiary teachers can base their teaching outcomes ensuring that both the emotional and traditional cognitive realms are being delivered.

Over the course of history, teaching at a tertiary level has changed, with a greater emphasis placed on learning outcomes in what is now a user-pays environment (Biggs, 2003). In order to maximise quality within the tertiary teaching arena numerous research papers have been published (Biggs, 2003) providing various models, conceptualisations and methodologies. The purpose of this paper is to provide a brief review of selected teaching models, including the author's own model and approach to tertiary teaching in the arena of social sciences and social development. These models will be discussed within the context of teaching practice environment.

The first of the approaches that will be reviewed is Dinham's (1996) tertiary teaching model. Dinham's approach places emphasis on four foundational areas of knowledge for teaching at a tertiary level. Firstly, the knowledge of the student as a learner. Secondly, a fundamental knowledge about teaching at a tertiary level. Thirdly, knowledge of the discipline that they are teaching, and finally the knowledge of himself or herself as a teacher. Dinham then consolidated the four fundamentally required areas into the three stage approach a) an understanding of how the discipline is learnt, b) an understanding of how the learner operates and c) an understanding of themselves as a teacher. Within this model emphasis is placed on both the development of the student as the learner and the teacher as the teacher. However more emphasis appears to be placed on the latter of the two.

The second approach to be reviewed is Ramsden's (1992) model. Ramsden offered a very simplistic argument for the purpose of teaching and teachers. He argued that the aim of the teacher is to make student learning possible (Suddaby & St George, 2006). This argument was

validated using three theories of teaching at different levels of learning, surface through to deep learning. Ramsden's first theory, referred to the teacher as telling or transmitting the information. Although a function of higher education, it offers only a surface approach to learning and is seemingly acceptable at an undergraduate level. Ramsden refers to the 1987 White Paper that indeed endorsed this form of traditional didactic teaching. This allows for the passive recipient by a large student body possible, yet may not be in the best interests of the students as learners. Within theory one the focus appears to be on the teacher and what they are doing rather than on the student and how the teaching process is maximising their learning potential.

Ramsden's (1992) second theory refers to teaching as the organisation of student activities. The sheer fact the students now exist within the theory's title offers an indication that the focus is moving in to direction of the students. Theory two associates the teacher to a more supervision role, who is involved in the designing of learning opportunities. Ramsden's (1992) third theory focused on the essence of teaching, to make learning possible. Within this theory there is a collaborative approach between the teacher and the student. This approach leads to a deeper learning and understanding than within theory one or two. It opens up the opportunity for reflective practice.

The author of this paper has a strong background in both psychology and cognitive science. Based on these philosophical foundations the following model of teaching at tertiary level is proposed. The proposed model can be aligned to humanistic adult education by humanistic psychologists Maslow and Rogers (Elias & Merriam, 1995). The humanistic adult education approach is concerned with the development of the individual as a whole with particular emphasis placed on emotional and affective characteristics (Elias & Merriam, 1995). This makes humanistic adult education by its very nature is student centred. This focus of education is particularly well suited to adult students, which has been championed by Malcolm Knowles, who is considered one of the most influential adult educators with America. Requesting an education style independent of pedagogy, the education of children, Knowles proposed andragogy, the art and science of helping adults learn (Knowles, 1970). Aspect of the aforementioned models and theories can be seen within the authors approach to tertiary teaching, the affective-cognitive approach, with particular reference to social science, social services and humanities.

### **Philosophy behind the cognitive-affective approach**

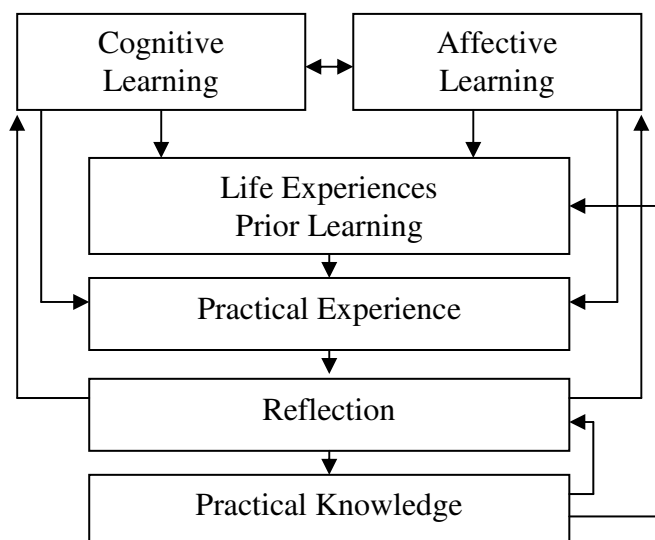
Within the realm of social science and humanities students are required to learn more than a series of theories and facts that they can then apply to real world experiences. They are also required to bring a humanitarian element to their practice. For this reason emphasis needs to also be placed on affective learning as well as the cognitive approach of acquiring knowledge. As such affective learning and reflection on one's own life experiences are critical for the development of such skills as social reasoning and problem solving. The cognitive-affective approach therefore provides the philosophical foundation from which tertiary teachers can base their teaching outcomes ensuring that both the emotional and traditional cognitive realms are being delivered.

As a degree of the learning required by students offers personal development a strongly student-centred learning approach is another important factor within the cognitive-affective philosophical approach. As the Chinese proverb states 'I do and I understand'. Practice experience and allowing time to reflect on what has been done is an integral component to

student-centred learning. The theory allows the student to develop their own knowledge around any given topic, particularly in regards to affective learning. Additionally, using a student-centred approach models best practice for their practical implementation of knowledge within their chosen field, i.e. the client-centred approaches used within counselling, psychotherapy, social work, and nursing.

### The cognitive-affective approach

The cognitive-affective approach (Figure 1.) integrates the two identified philosophical approaches above, namely cognitive and affective learning, and the use of practical experiences and reflective learning.



**Figure 1.** The cognitive-affective approach to teaching.

#### *Cognitive learning*

Cognition is the term given to mental processes such as sensation, perception and thinking that results in the acquisition of knowledge (Walklin, 1990; Ashcraft, 1994; Sternberg, 1996). Cognitive learning has been identified as dealing with the recall or recognition of knowledge and the development of intellectual skills and abilities (Bloom, 1956; Knowles, 1990; Walklin, 1990). Such mental processing involves a number of complex behaviours such as reasoning and problem solving.

Within this domain different levels of cognitive functioning come into play (Walklin, 1990).

- Simple recall of knowledge: Emphasis is placed upon remembering facts and terminology.
- Comprehension: The ability to explain why they are using formulas and equations.
- Application: The ability to apply knowledge to different situations and environments.
- Analysis: The break down of statements into its basic elements and to ability to apply and relate each element back to the remainder.
- Synthesis: The ability to assemble an array of information to form a new arrangement.
- Evaluation: The ability to a make valued judgments about arrangements, arguments and methods.

<p><b>Cognitive Learning</b></p> <ul style="list-style-type: none"> <li>- Simple recall</li> <li>- Comprehension</li> <li>- Application</li> <li>- Analysis</li> <li>- Synthesis</li> <li>- Evaluation</li> </ul>
---



### ***Affective learning***

Affective learning is described as changes in interests, attitudes, feelings, emotions, and values. It is the development of appreciation and adequate adjustment (Bloom, 1956; Knowles, 1990; Walklin, 1990). The principle of affective learning is based on internalisation (Krathwohl, 1964), a process that describes leaning and growth in the affective field (Walklin, 1990). Internalisation is characterised as a quality that refers to an individual's inner state or feeling, and incorporates ones own values, attitudes and interests.

The principle of affective learning is characterised by the internal association concluded by the students after obtaining instructions from an external source, such as a teacher or tutor. The result of the affective learning process is the inner growth of the individual. The individual becomes able to make value judgements according to set codes of conduct and ethical principles that they have been exposed to within the affective learning process (Walklin, 1990).

The process of affective learning can be categorised into the following structure, according to Krathwohl's (1964) work.

- Receiving or attending: The awareness and willingness to receive information.
- Responding: The willingness to respond and responding in satisfactory manner.
- Valuing: Preference for and the acceptance of values. Commitment to values.
- Organisation: The conceptualisation and organisation of values and value systems.
- Characterisation by a value/complex value: Characterised and generalised value systems that can be applied.
- 

<p><b>Affective Learning</b></p> <ul style="list-style-type: none"> <li>- Receiving/Attending</li> <li>- Responding</li> <li>- Valuing</li> <li>- Organisation</li> <li>- Characterised by complex value</li> </ul>
---



### ***Life experiences and prior learning***

No adult teaching model should discount the student's life experience and prior learning, particularly in the fields of social sciences/services and humanities. Learning and achievements from past experiences can account for a large degree of the skills and knowledge that is necessary in both social sciences/services and humanities. For example the emotional pain which goes with losing a loved one, the joy that comes from watching your children take their first step. The affective learning that goes with those emotions cannot be taught in the classroom. Having first hand knowledge and experiences of such life issues and

emotional responses better equips the individual to help or counsel someone else through a similar experience.

### ***Practical experience***

Practical experience of any given exercise aids in the learning process and the development of one's own knowledge and understanding. Sternberg (1985) provides the triarchic theory of intelligence that gives three different forms of 'practical' experience; 1. Practical, 2. Analytic, and 3. Creative. The triarchic theory links the individual's internal world, experiences and the external influences. This practical experience will then result in experiential learning. Experiential learning can be defined as the knowledge and skills acquired through life, work experience, and study that are not formally demonstrated through any educational or professional organisation (Walklin, 1990).

### ***Reflection***

Reflection is a process of reflecting on what has been learnt and discovering what existing information is no longer appropriate or needs to be changed. This form of learning is referred to by Knowles, Holton III, and Swanson as 'double-loop-learning' (2005, 190) for that very reason. Reflective practice allows for the consolidation of information and provides the opportunity to experience the emotional content for affective learning outcomes. Additionally it provides the opportunity to reflect on one's own professional practice, a skill that is paramount within the fields of humanities and social science/services. Hence, the skill and knowledge of reflective learning becomes a secondary skill set as part of the overall learning process within the cognitive-affective approach.

Gardner (Sternberg, 1996) described what he called interpersonal intelligence. This type of intelligence/knowledge refers to how we understand another individual's behaviour, motives and emotions. Gardner also described intrapersonal intelligence that we use to understand ourselves. We use intrapersonal intelligence/knowledge to have a basic understanding of who we are, what makes us tick. Both forms of intelligence can become the end result of reflective learning.

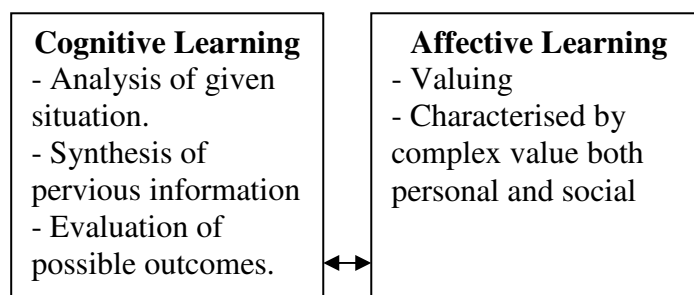
### ***Practical knowledge***

Practical knowledge is the overall outcome of the cognitive-affective approach to learning and teaching. It provides the individual with not only learnt knowledge within a given discipline, but also the ability to apply that knowledge in a practical environment.

## **The cognitive-affective approach in practice**

In order to obtain a fuller understanding of the cognitive-affective approach outlined within this paper the practical application of the model will be detailed, as it would apply in the teaching of a social services course at tertiary level. The author of this paper is currently teaching two courses within Mental Health and Mental Health Support at both a certificate and degree level. In order to fulfil the requirements of the course students must complete both academic work and a practical placement. As such learning which occurs within the classroom environment (cognitive learning) needs to be complemented by the practice placement work within the community setting. As a result affective learning should not only occur, but should also intertwine with the knowledge the individual has at a more academic and cognitive level.

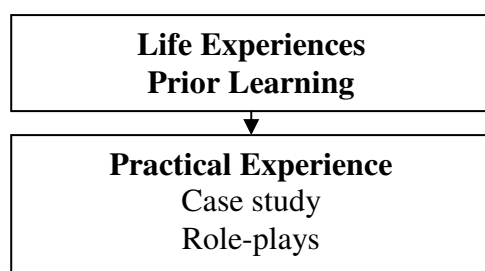
An example of this would occur in the teaching of practical ethics within a health setting. This is often a topic area that can be perceived as a purely academic exercise, but on the other hand can produce huge emotional responses. Within the applied ethics environment individuals will not only need to attend to cognitive processes at a high level (Figure 2.), such as analysis, synthesis and evaluation, which Walklin (1990) referred to as invention, but additionally deal with the intrapersonal affective processes that will arise in regards to personal and social values. In order to combat such a 'real life' workplace situation students require the necessary skills to make professional decisions, hence drawing on their learning both cognitively and affectively.



**Figure 2. Cognitive and affective learning within an applied setting**

To take this example to the next level within the cognitive-affective approach to social services teaching we need to incorporate the individuals past life experiences and prior learning (Figure 3.). This particular step is paramount when considering the learning process of adults as alluded to above. Within this domain the students are able to draw on previous practical undertaking and apply them to the current situation. In doing so, also updating that prior knowledge with the new cognitive and affective learning to reach a more appropriate and professional conclusion.

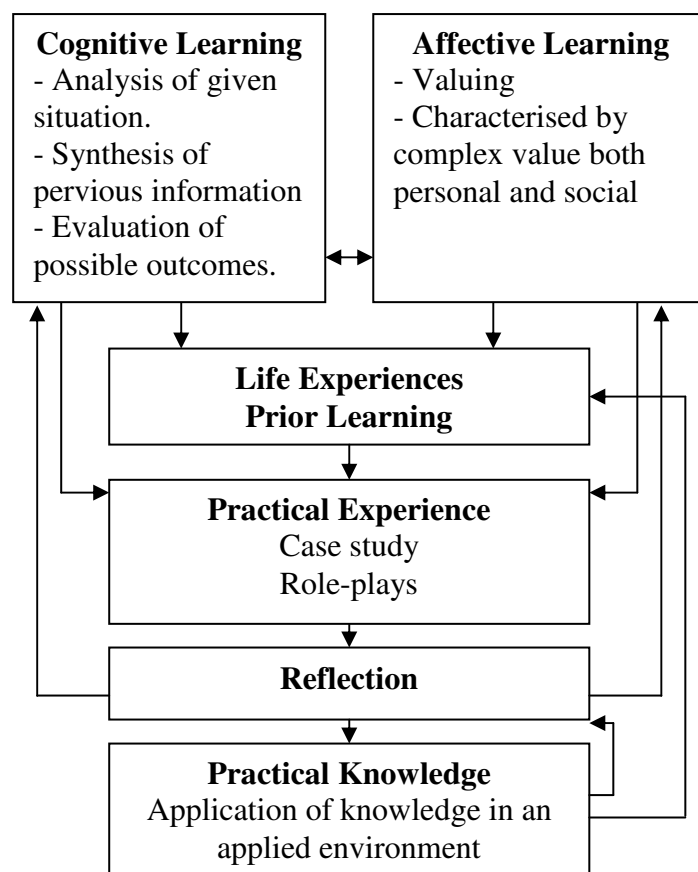
By introducing such skills through a student-centred humanistic approach such as role-plays and case studies the student are able to have exposure to 'real life' scenarios in a safe environment. In this instance asking the students to work through a case study in a group sitting (Figure 3.), and getting the student to consider each other's values and points of view. This practical experience also allows for the assessment of competencies inherent in the training of social sciences and humanities, particularly within social services.



**Figure 3. Life and practice experience within an applied setting.**

Reflection on this process provides the student with the time and opportunity to evaluate not only the newly acquired information but also the learning process. At this point students are able to 'bring' together the different components of the cognitive-affective approach (Figure 2. & 3.) to formulate they own understanding and conceptualisation of the information given in the teaching session, and create they own knowledge.

The practical knowledge is then create by the individual completes the cognitive-affective cycle. However, the approach is structure in such a way that the knowledge can always be built, reflection on and changed as new learning is undertaken (Figure 1. & 4.). To continue through with the ethics in an applied setting example, the practical knowledge obtained through the cognitive-affective approach will guided to the individual to make both an academic and professional decision.



**Figure 4.** The cognitive-affective approach in practice.

## Conclusion

In the arena of adult teaching and education numerous models and approaches have been developed to account for individual styles (both that of students and teachers) and different approaches to learning. Within this paper the approach details has been tailored for a specific adult learning group with a set focus on their cognitive and affective learning in order to obtain practical applicable knowledge. The work of other adult educators and theorists has been described briefly to indicate parallels between their work and that of the papers author, offering a degree of validation to the approach detailed.

The cognitive-affective approach in essences provides a framework in which both academic and affective information and knowledge can be transmitted and individually interpreted by the students. The approach also allows for the student's own knowledge and learning to develop through the practical experiences and reflective learning process. In this context the aim is for the individual to develop his or her own practical knowledge, particular from an

affective perspective. This takes into consideration the humanistic adult learning approach and is truly intrinsic to student centred learning.

The cognitive-affective approach is believed by the author of this paper to include some of Dinham's (1996) four fundamental components. The existences of the approach as a framework puts it on the realm the student as a learner and its application to tertiary and higher level education. It also provides an intention of how the discipline is both learnt and taught. However, the model does not pay attention to how the teacher operates in the teaching/learning environment. The affective learning component will natural include elements of the teachers own values and belief systems. Again this is inherent in the teaching process. Such elements need to be considered should the approach be revised. By the same token Ramsden (1992) approach also places emphasis on the importance of the teacher's role. Nevertheless, it is believed that the cognitive-affective approach facilitates the learning process, and continuous reflective learning. In essences it is a humanistic model that guides adult learning and reflective practice to assist in the acquisition of practical knowledge.

- Ashcraft, M. H. (1994). *Human memory and cognitive* (2<sup>nd</sup> ed.). New York: Harper Collins.
- Biggs, J. (2003). *Teaching for quality learning at university* (2<sup>nd</sup> ed.). Berkshire: Open University Press.
- Bloom, B., S. (1956). *Taxonomy of education objectives. Handbook I: Cognitive domain*. New York: McKay.
- Dinham, S. M. (1996). What college teachers need to know. In R. J. Menges, M. Weimer & Associates (Eds.). *Teaching on solid ground*. (pp. 297 – 313). San Francisco: Jossey-Bass.
- Elias, J. L. & Merriam, S. B. (1995). *Philosophical foundations of adult education*. (2<sup>nd</sup> ed.). USA: Krieger Publishing Company.
- Knowles, M. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. New York: Association Press.
- Knowles, M. (1990). *The adult learner: A neglected species*. (4<sup>th</sup> ed.). Houston: Gulf Publishing Company.
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2005). *The adult learner: The definitive classic in adult education and human resource development*. (6<sup>th</sup> ed.). London: Elsevier.
- Krathwohl, D. R. (1964). *Taxonomy of educational objectives. Handbook 2: Affective domain*. London: Longman.
- Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. New York: Cambridge University Press.
- Sternberg, R. J. (1996). *Cognitive Psychology*. Fort Worth: Harcourt Brace College Publishers.
- Suddaby, G., & St George, A. (2006). *Learning and teaching in tertiary education: Study guide and readings Module One*. Palmerston North, NZ: Massey University.
- Ramsden, P. (1992). *Learning to teach in higher education* (pp. 109 – 119). London: Routledge.
- Walklin, L. (1990). *Teaching and learning in further and adult education*. England: Stanley Thornes (Publishers) Ltd