



**INVESTIGATING THE ASSOCIATIONS BETWEEN ENGLISH LANGUAGE  
TEACHERS' REFLECTIVENESS AND TEACHING EXPERIENCE**

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**ABSTRACT**

Interest in language teacher reflection has grown massively after the emergence of post-method era. This study aims to explore the potential associations between teacher reflectiveness and experience among EFL teachers. To this end, a standard English Language Teaching Reflection Inventory (ELTRI) was employed to measure the reflectiveness of 179 English language teachers. The results revealed that there is a negative correlation between teaching experience of teachers and their reflectiveness that is aligned with the tacit claims of Cognitive Consistency Theories, specifically Congruity Theory. It is suggested that as teachers grow more experienced, they tend to become more stabilized in their instructional praxis. The findings of this study bear important implications for those who are in the realm of teaching in general and language teaching in particular.

**Key Words:** Teacher reflectiveness; Language teaching; Teacher experience.

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## 1. Introduction

*Reflective Teaching* has been the theme of many studies for those researchers whose aim is to establish a link between teacher autonomy and professionalism with reference to the new accountabilities of modern educational systems (Bailey, 2006; Clark, 2006; Urzua & Vasquez, 2008; Watts & Lawson, 2009; Yaman, 2004). Some other terms such as *reflective practice*, *inquiry-oriented teacher education*, *reflection in action*, *teacher as researcher* and *teacher as problem solver* has been used as alternatives for the term *reflective teaching* in the literature (Calderhead, 1989; Davies, 2006; Filiz, 2008; Schofnner, 2009). What type of teacher is a *reflective* one? The answer to this question is not easily achievable. The problem is mainly with the word *reflectivity*, which is subject to many definitions and interpretations. Reflectivity is defined as the endeavor of human beings to resort to introspection and the willingness to learn more about their fundamental nature, purpose and essence (Beitel, Cecero & Ferrer, 2004). Indeed, we should use this definition in our everyday discourse; however, from this perspective, the senses of deep contemplation, meditation and argumentation are neglected (Kuyt, Reay & Freeman, 2001). John Dewey, one of the pioneering figures establishing modern education, wrote about reflective teaching over a century ago (Carter, Cividanes, Curtis & Lebo, 2010). Dewey (1916) explained, "teachers should take time to reflect on their observations, knowledge, and experience so that they can effectively nurture each child's learning" (as cited in Carter et al., 2010, p.3). Since the publication of Schon's nominal article in 1983, the concept of reflective practitioner, there has not been an agreement on the exact meaning of the term *reflection*. For Schön, "the reflective practitioner is a transformative practitioner, implicitly involved in changing the situation from what it is to something he likes better" (as cited in Tubbs, 2006, p. 171). He adds that the work of the reflective practitioner carries a utopian vision of social reform (Schön, 1983, p. 340). Given the other definitions developed in the literature, Kuyt et al., (2001) describe reflection as "a generic term that describes the processes involved in exploring experience as a means of enhancing understanding" (p. 3). This definition is not dissimilar to Schon's. Vidmar (2006), sees reflection as "fundamental to assessment, decision-making, and a deeper understanding of the teaching practice". For him, "to reflect is to think about where you have been and/or what has happened in order to clarify an experience" (p. 4).

The second problem is with the word self. Branson (2009) proposes a conceptual framework (Figure 1) with a diagrammatical representation of the various components of the self as follows:

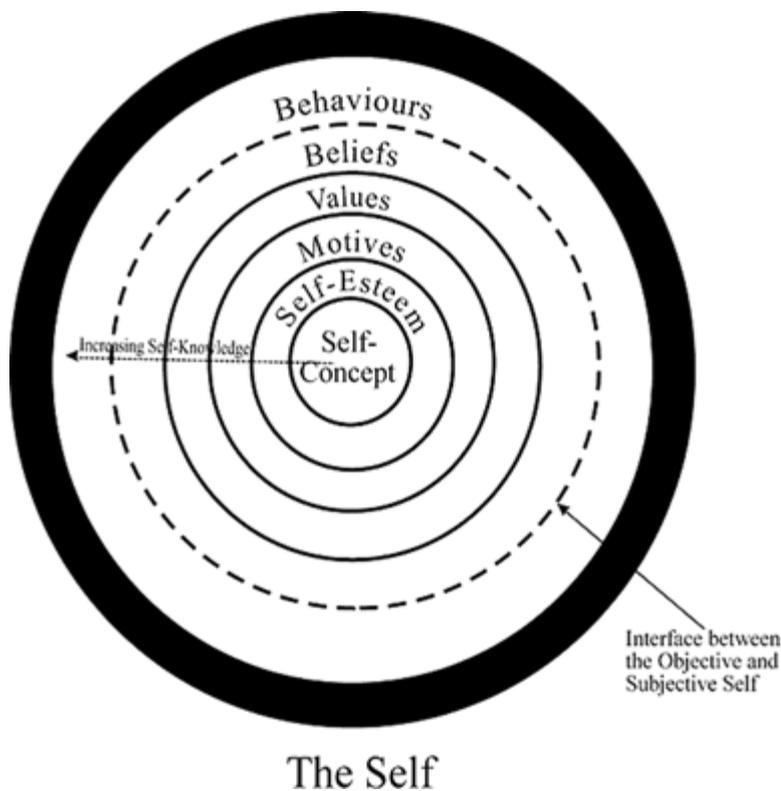


Figure 1. Branson's (2009) proposed diagrammatical representational model of the various components of the *Self*

All teachers should be in control of whatever happens in their classes. No doubt teaching is a demanding job and teachers always encounter many conundrums in the course of their practice. A reflective teacher continuously observes conditions and gathers information in order to be able to find solutions for any possible difficulty or problem (Vidmar, 2006; Eby, Herrell, & Hicks, 2002). Although the work of Carter et al. (2010) mainly addresses the teachers of children, their description of the characteristics of a reflective teacher is elucidative. According to Carter et al. (2010), a reflective teacher:

- examines his or her own reactions to children or their actions to understand their source
- is curious about children's play and watches it closely
- documents details of children's conversations and activities
- takes time to study notes and photos to puzzle out what is significant
- eagerly shares stories about children's learning with families and co-workers
- asks co-workers and children's families for their insights
- reads professional literature to learn more

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Two points regarding teacher reflectivity are of importance. First, practice of reflective teaching is a constant *process*, not a single *evaluation* of teaching (Kuyt et al., 2001). Second, reflective teacher can *predict* well. This is his prediction capability that equips him/her with appropriate tools and strategies to address any potential problems (Vidmar, 2006; Kuyt et al., 2001). Zeichner and Liston (1996) argue that institutional constraints and nature of classroom interactions make reflective teaching undesirable, unrealistic, and perhaps impossible. In these situations, teachers must resort to their *intuition* which is the opposite point of *reflection* (Zeichner & Liston, 1996). The other criticism leveled at reflective teaching is the point that even if teachers have enough time and expertise to reflect on their practices in order to gather resourceful information, they are not able to act upon their findings appropriately and they may even make deconstructive decisions (Zeichner & Liston, 1996). Role of teacher training courses in preparing teachers to reflect on their teaching judiciously should not be downplayed.

Language teachers are always encouraged to engage in reflective practices, through writing diaries, discussing the class with their colleagues and through taping their classes and giving it a second try. This points to the paramount importance that Reflective practices in ELT have gained momentum since 1990 as a consequence of the post-method debate, which by many was defined as moving to the other end of the continuum from method based Language education. Although, many research have been conducted on the issues related to EFL teachers` reflectivity, the role of “teacher experience” on language teachers` reflection has been an uncharted area to date. According to the literature, being a reflective teacher requires some skills, capabilities and tact which make reflective teachers distinct from non-reflective ones. Therefore, it can simply be claimed that as teachers become more experienced, they become better reflective teachers as it is commonly believed that experience is a real asset for mastery of any praxis or skill (Bailey, 2006). What makes this study unique is its examination of the relationship between language teachers` reflectivity and the length of their service as a teacher (experience)

## 2. Literature Review

Yaman (2004) sees teachers as “constructivists” whose actions are heavily based on in thought frames (p. 121). Their perspectives towards their life and career reflect their implicit knowledge and beliefs. Ergo, knowledge and practice, may not be deemed as separate agents but as complimentary. Ones` self-knowledge is an imperative prerequisite for further performance development (Williams & Burden, 2000). Accordingly, Lee (2006) states that reflection and its level rely on personal background and personality, field and experience providing solid ground for individual differences on reflection. Griffiths, (2000) argues that in reflection, teachers ought to have some specific characteristics such as open-mindedness, wholeheartedness, and responsibility so as to be able to base their teaching on preconceptions and prejudices in the classroom. Consequently, reflection cannot be a simple

and static notion in its nature, but a dynamic and complex process to be adapted; thus, it is quite important for educating preservice teachers with this ability to implement critical thinking, problem solving and applying knowledge and theories practically to play the roles as qualified teachers (Kayapinar & Erkus, 2009). McMahan (1997) conducted a case study with two pre-service teachers through their first placement in the field that could be referred as practicum; he concluded that both pre-service teachers gained apparent reflection with different characteristics. In his qualitative research, Parkison (2009) searched on *how to empower* side of reflective practice to increase instruction quality by enabling pre-service teachers with different majors while they are practicing in the field. Besides, Filiz (2008) adopted a comparative study and investigated pre-service teachers and experienced teachers' attitudes in terms of reflectivity, and she observed significant difference between pre-service teachers and experienced teachers.

Korthagen and Wubbles (1995) found that student teachers are different in their *learning orientation*. Some were labeled internally oriented because they viewed learning to teach as a self-guided discovery. Externally oriented teacher students looked to their teachers and instructors' guidance for learning how to teach (Korthagen & Wubbles, 1995). Moon (2006) investigated student teachers' reflective experiences during teaching practice period and found that student teachers consider reflective teacher as a real challenge and, consequently they were not able to specify their deficiencies in their classroom performance. After examining case studies of three teachers who were working with a reflective approach aimed at developing competencies in analyzing and managing classroom discussions on a socio-scientific issue, (Wolfensberger, Piniel, Canella & Kyburz-Graber, 2010) proposed characterizations of the distinct ways in which the case study teachers looked at the reflective processes. "Each teacher, according to his or her individual needs in the real-life situation, was able to make use of certain elements of the framework employed in this project while judging other less helpful, and, as a result of the reflective process, came to personal conclusions regarding the potential and the preferred setting of classroom discussions on socio-scientific issues" (p.7). Kurt, Reay and Freeman (2001) found in their study that the main problem for teachers to become better reflective instructors and for students to become reflective better learners is lack of time for reflection.

In English language teaching arena, Pennington proposes a reflective orientation "as a means for (1) improving classroom processes and outcomes, and (2) developing confident, self-motivated teachers and learners" (as cited in Farrel, 1999). Kumaradivelu (2006) relates ascent of reflective teaching in Teaching English as a Foreign language (TEFL) to post-method era (as cited in Akbari, 2007). Akbari (2007) explains that "In the method era, teachers were required to implement the dictates of language teaching methods without having much influence on the way methods were formulated in academic circles; the relationship between theoreticians and practitioners was (and to some extent still is) of a top-down nature in which teachers were assigned little critical voice" (p.2). He further classified reflection into two categories, namely reflection-in-action and reflection-on-action, former being the reflection done in the classroom while a problem rises and the later, on the contrary is done after the teaching is done. Schon (1983) makes a distinction between reflection-in-action and

reflection-on-action. Reflection- in-action is the real life, instant, online reflection that teachers embark on as they confront a problem in the classroom *while* they are teaching (as cited in Akbari, 2007). For Schon, "Reflection-on-action is the type of reflection that teachers get involved in *posteriori* of the event; it is the most common type of reflection which is encouraged and practiced in universities or centers of higher education, and unlike reflection-in-action, which is an individual activity, reflection-on-action is normally exercised collectively and in groups" (Schon, 1983, p. 57). For language teachers to become more reflective there have been suggested many useful tools such as teaching diaries, peer observation, students' feedback and audio recording (Fatemipour, 2013). Reflecting on his own practice as an EFL teacher, Saylag (2012) found that reflection affected his classroom management positively.

The studies exploring the relationship between language teachers' experience and reflectivity are scant in the literature. Therefore, this study aims to fill this gap in the literature.

### 3. Methodology

#### 3.1. Participants

The sample consisted of 179 English language teachers from four Iranian provinces of Tabriz, Kermanshah, Tehran, and Sari were asked to take part in the study. They were given a standard validated questionnaire to fill out. The participants were teaching both at state schools and at private language institutes. They aged 21 to 54. The teachers experience ranged between 1 to 19 years of instruction.

#### 3.2. Instrument

Akbari, Behzadpoor and Dadvand (2009) English language Teaching Reflection Inventory (ELTRI) was employed to measure the reflectiveness of English language teachers (see the appendix). Yesilbursa (2013) assessed the construct validity of the instrument and concluded that the measure can be used as valid tool to gauge the teacher reflectiveness construct.

The questionnaire included 29 items that measured the extent to which teachers reflected on their teaching career. A pilot study was conducted prior to the commencement of the study on 57 language teachers, who were subject to random selection. The internal consistency of the questionnaire calculated to be Cronbach Alpha of 0.79 based on the results of the pilot study. The questionnaire employed in the study covered six different components of reflective teaching which are as follows:

**Practical element:** This component includes those items that deal with the tools and the actual practice of reflection. Examples are journal writing, multimedia recording, teaching portfolios etc.

**Cognitive element:** This element is concerned with teachers' attempts aimed at professional development. Conducting small-scale classroom research projects (action research), attending conferences and workshops related to one's field of study, and reading the professional literature are among the behaviors included in this domain (Farrel, 1999, 2001).

**Learner element (affective):** This component includes those items that deal with a teacher's reflecting on his/her students, how they are learning and how learners respond or behave emotionally in their classes.

**Meta-cognitive element:** This component deals with teachers and their reflections on their own beliefs and personality, the way they define their practice, their own emotional make up, etc.

**Critical element:** This component consists of items that refer to the socio-political aspects of pedagogy and reflections upon those. Items falling in this category deal with teachers' reflecting on the political significance of their practice and introducing topics related to race, gender and social class, exploring ways for student empowerment (Zeichner & Liston, 1996).

**Moral element:** Items included here check for teachers' reflecting on moral issues.

### 3.3. Results

**Table 1:** Correlations

		Practic al	Cognitiv e	Affectiv e	Metacognitiv e	critical	Moral
Teaching Exp.	Pearson Correlation	-.337**	-.129*	-.046**	-.207	.118*	-.025
	Sig. (2-tailed)	.005	.04	.002	.090	.03	.839
	N						
	179						

\*.Correlation is significant at the 0.05 level (2-tailed)

\*\* . Correlation is significant at the 0.01 level (2-tailed). Exp. =experience

**Table 2.** Descriptive Statistics

	Mean	Std. Deviation
Teaching exp.	4.29	1.235
Practical	14.2	3.6
Cognitive	13.7	4.5
Affective	27.1	5.4
Metacognitiv	19.08	3.5
e		
Critical	16.12	4.2
Moral	3.37	1.2

*Note* .Exp. = experience

As shown in Table 2, the highest component of reflection among the participants is the affective component ( $M=27.4, SD=5.4$ ). The second high component among EFL teachers is the metacognitive component ( $M=19.08, SD=3.5$ ). After the metacognitive component, the critical component that has the highest mean ( $M=16.12, SD=4.2$ ). Practical ( $M=14.2, SD=3.6$ ), cognitive ( $M=13.7, SD=3.6$ ) and moral ( $M=3.37, SD=1.2$ ) are the other three components in reflection with their means and standard deviations given in Table 2.

#### 4. Discussion

As teachers are considered as professionals in the process of intellectual and professional growth, reflective instruction is an imperative issue that may enable teachers to combine theoretical knowledge with practice, to adopt critical thinking skills and to make more informed decisions in unexpected situations (Clarke, 2006; Filiz, 2008; Shoffner, 2009).

Teaching is a complex profession requiring the creative application of technical and scientific knowledge in an optimal way in order to meet desired objectives satisfactorily (Watts & Lawson, 2009). Teachers should be capable of rigorously monitoring the learning of their students by taking into account that every individual student is unique while at the same time consider the factors such as the environment and the facilities which are at their disposal so as to attain the aims and objectives established by the curricula and relevant authority (Pajares, 1992; Shoffner, 2009).

The concept of teacher reflection has been found many exponents in the literature on teaching and teacher training for several decades, and what is normally referred to as reflection is a process in which teachers deem their work as subject to self-examination, self-monitoring and continuous learning (Braun & Crumpler, 2004; Griffin, 2003). Though there exists nuances in description, the axiomatic notion in research literature is that through reflection the teacher better understands and extends his/her professional activity and that reflecting on teaching problems will lead to new insights for educational practice (King &

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Kitchener, 2004). The evidence is strong that the overall benefit of this process of check-over and self-monitoring is that it will enrich, systematize and augment professional knowledge (Masai & De Corte, 2005). The urge to build on self-reflection strategies for teachers has been espoused by the arguments of Enactivist Theoricians which have their roots in both traditions of Constructivism and Embodied Cognition (McGann, De Jaegher & Di Paolo 2013; Varela, 1987). Accordingly, Thompson (2011) holds that enactivism incorporates four key ideas. First, human beings are considered to be fully autonomous agents that can actively generate and keep their own identities, so they enact or create their own conceptions. Secondly, human consciousness is an autonomous system such that it actively generates and maintains its own coherent and integrated paradigms of activity, based its extraordinary mechanisms as a systematically closed sensorimotor network. Consequently, human consciousness does not merely process information in the computationalist aspects; rather it gives shape to the meaning. Third, human cognition is a type of embodied action, so cognitive structures and processes emerge from continuous consciousness reactions to understandings and operations.

The fourth idea is that a person's worldview is not a pre-determined, external mindset, exactly represented internally by his or her brain, but, rather, the person's world is a relational domain enacted or brought forth by the person's unique inner freedom of choices and personalized way of resorting his or her environment (Thompson, 2011).

Applying the Enactivist learning theory to a teacher's professional development means the plan must be situated in the teacher's own real life and routine experiences. Ergo, to become a wisdom-led teacher, we must realize that any participation in artificial situations, theoretical presentations, observations of others, or intensive course work will have significant limitations (Richardson, 1989).

These sorts of experiences will only enhance the leader's cognitive awareness of what is needed to be a wisdom-led teacher, but will not cause the necessary changes in his or her professional views. Then, the necessities for implementation of self-reflection strategies can be explained succinctly by Branson's (2009) words who states that "without specifically directed personal learning from their own daily working environment and leadership experiences, leaders might know what wisdom-led leadership is but they won't know how to personally achieve it. The gaining of wisdom-led leadership is practiced, not taught; hence, the continual application of self-reflection and self-inquiry in the daily professional life of a wisdom-led leader is unequivocal" (p. 71). From the enactivist learning theory perspective, this means that teachers wanting to become more wisdom-led, have to learn from within their own current setting.

The findings of this study are aligned with the central ideas of Cognitive Consistency Theories of Attitude Change in general and Congruity Theory in particular (Osgood & Tannenbaum, 1955). One of the prevalent notions in social psychology is the view that the human mind has a strong "need" for consistency and a person will change his attitudes in order to overcome or reduce inconsistency, and this is known as the "Principle of

Consistency" (Cialdini, 1994). The principle argues that individuals are naturally motivated toward cognitive consistency and will change their attitudes, beliefs, perceptions and actions to reach a satisfying level of that consistency (Cialdini, 1994). Accordingly, the congruity model aims to allow the psychologists to make exact predictions about changes in attitude. Some studies have found that teacher experience has a strong effect on teacher productivity, and the impact is stronger than the effect of most other observable teacher-related variables including advanced degrees, and class size (Ladd, 2008; Sass, 2007). In light of these inclinations towards more consistency, a longing grows for constant avoidance of *Cognitive Dissonance*. Cognitive Dissonance refers to "situation involving *conflicting attitudes*, beliefs or behaviors produce a *feeling of discomfort* leading to an alteration in one of the attitudes, beliefs or behaviors to reduce the discomfort and restore balance" (Festinger, 1969, p. 97). Figure 2 depicts the tenets of Cognitive Dissonance Theory.

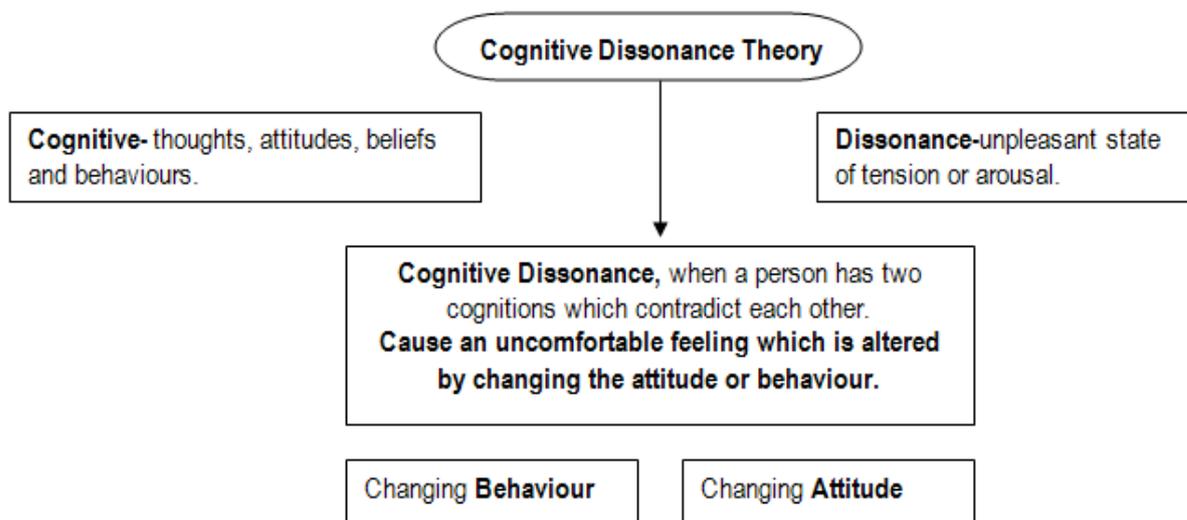


Figure 2. Cognitive Dissonance Theory

Our findings corroborate the arguments of this theory as the more experienced teachers tried to avoid any *Dissonance* by sticking to their routine practices over time. The reason lies in the fact that teachers want to evade any potential uneasy feelings of discomfort, which might be engendered by changing the attitude or behavior.

The results of present study also revealed that as teachers grew more experienced, they reached a "level of consistency" and their attitude towards self-reflection vacillations turned into a more "fixed methodology". As it was expected, the practical component of the inventory indicated the highest level of negative correlation. It means that as teachers become more experienced, they less resort to journal writing, multimedia recording, teaching

portfolios. Perhaps more experienced EFL teachers are not pacing up with the latest curricular and pedagogical advances. The disinclination in self-reflection practice can also be a result of teacher burnout. Either way, systematic professional training and reward structures should be used to encourage the ongoing development of teachers' self-scrutiny skills. The evidence that the most experienced language teachers may not be the most reflective should prompt policymakers and educational administrators to reexamine the mere intense focus on the beginning teachers' practices. This is not to say experience does not matter; however, such policies may attenuate effectiveness. Teachers reflect upon their experiences as a learner, or on their experiences as a teacher to come to terms with typical assumptions that shape how we perceive. Most teachers develop their classroom skills at the beginning of their teaching careers. Teachers entering the profession may see their initial instruction success at stake, but with experience they gain a repertoire of teaching strategies and skills. Reflective teaching suggests that experience alone is not sufficient for professional progress, but that experience complemented with reflection can be a strong catalyst for language teacher growth.

### 5. Conclusion

To sum up, we examined the potential associations between teacher reflectiveness and experience among 179 EFL teachers. The results unfolded that there is a significant negative relationship between teaching experience of teachers and their reflectiveness. We conclude that our finding corroborate the tenets of Congruity Theory within the framework of Cognitive Consistency Theories. Our results are also solidly dovetailed by the arguments of Enactivism Theory. Correspondingly, the findings indicated that, as teachers grow more experienced, they are more inclined to be stagnant in their professional practice.

### 6. Limitations and Implications

Qualitative data collection procedures may be used for more validated findings. Teacher self-reflection diaries can also be analyzed (for example using Thematic Content Analysis) to see what are those self-reflection strategies that more experienced teachers exercise. The examination of the role of gender can also open new windows for further research. Attribution Theory can be used to find the main reasons to which more experienced teachers attribute their lack of motivation to use self-reflection.

### References

- Beitel, M., Cecero J.J. & Ferrer, E. (2004). Psychological mindedness and cognitive style. *Journal of Clinical Psychology*, 60 (6), 567-82.
- Akbari, R. (2007). Reflection on reflection: a critical appraisal of reflective practice in L2 teacher education. *System*. 35 (2), 192-207.

- 
- Bailey, K. M. (2006). *Language teacher supervision: a case based approach*. U.S.A: Cambridge University Press.
- Branson, C. M. (2006). Beyond authenticity: Contemporary leadership from a worldview perspective. *Values and Ethics in Educational Administration Journal*, 4 (4), 1-8.
- Branson, C. M. (2007). Improving leadership by nurturing moral consciousness through structured self-reflection. *Journal of Educational Administration*, 45 (4), 471-495.
- Branson, C. M. (2009). *Leadership for an Age of Wisdom*. Dordrecht, Netherlands: Springer Educational.
- Braun, J.A., & Crumpler, T.P. (2004). The social memoir: An analysis of developing reflective ability in a pre-service methods course. *Teaching and Teacher Education*, 20, 59-75.
- Calderhead, J. (1989). Reflective teaching and teacher education. *Teaching and Teacher Education*, 5(1), 43-51.
- Carter, M., Cividanes, W., Curtis, D., and Lebo, D. (2010). Becoming a Reflective Teacher. *Teaching Young Children* 3(4), 1-4.
- Cialdini, R.B. (1994). *Influence: The Psychology of Persuasion*, NY: Quill
- Clarke, A. (2006). The nature and substance of cooperating teacher reflection. *Teaching and Teacher Education*, 22, 910-921.
- Davis, E. A. (2006). Characterizing productive reflection among pre-service elementary teachers: seeing what matters. *Teaching and Teacher Education*, 22, 281-301.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York: Macmillan.
- Eby, J., Herrell, A., & Hicks, J. (2002). *Reflective planning, teaching, and evaluation, K-12*. Columbus, Ohio: Merrill Prentice Hall
- Farrel, T. (1999). Reflective practice in an EFL teacher development group, *System*, 27, 157-172
- Farrell, T. (2001). Tailoring reflection to individual needs: A TESOL case study. *Journal of Education for Teaching*, 27(1), 23-38.

- Fatemipour, H. (2008). *The effectiveness of the tools used in reflective teaching in EFL and ESL contexts* (Unpublished doctoral dissertation). Panjab University, Chandigarh, India
- Festinger, L. (1962). Cognitive dissonance. *Scientific American*, 207 (4), 93–107.
- Filiz, Y. (2008). *The attitudes of teachers English as a foreign language towards reflective teaching*. Published Master Thesis. The University of Uludag, Bursa.
- Freese, A.R. (2006). Reframing one's teaching: Discovering our teacher selves through reflection and inquiry, *Teaching and Teacher Education*, 22, pp. 100–119.
- Griffiths, V. (2000). The reflective dimension in teacher education. *International Journal of Educational Research*, 33, 539-555.
- Griffin, M.L. (2003). Using critical incidents to promote and assess reflective thinking in preservice teachers. *Reflective Practice*, 4(2), 207–220.
- Kayapınar, U & Erkuş. (2009). A. Measuring teacher reflection: development of TRS. *Eurasian Journal of Educational Research*, 37, 144-158.
- King, P.M., & Kitchener, K.S. (2004). Reflective judgment: Theory and research on the development of epistemic assumptions through adulthood. *Educational Psychologist*, 39(1), 5–18.
- Korthagen, F.A.J., Wubbles, T. (1995). Characteristics of reflective practitioners: Towards an operationalization of the concept of reflection. *Teachers and Teaching: Theory and Practice*, 1, 51–72.
- Kumaravadivelu, B. (2001). Toward a post method pedagogy. *TESOL Quarterly* 35, 537–560.
- Kuyt, J. A., Reay, G. & Freeman. (2001). Experiences of Reflective Teaching, *Learning in Higher Education*, 2 (2), 128-142
- Ladd, H. F. (2008, November). *Value-Added Modeling of Teacher Credentials: Policy Implications*. Paper presented at the second annual CALDER research conference, The Ins and Outs of Value-Added Measures in Education: What Research Says, Washington, D.C.,
- Lee, H. (2005). Understanding and assessing pre-service teachers' reflective teaching. *Teaching and Teacher Education*, 21, 699-705.

- 
- Masui, C., & De Corte, E. (2005). Learning to reflect and to attribute constructively as basic components of self-regulated learning. *British Journal of Educational Psychology*, 75, 351–372.
- McGann, M., De Jaegher, H. & Di Paolo, E. (2013). Enaction and psychology. *Review of General Psychology*, 17 (2), 203–209.
- McMahon, S. I. (1997). Using documents written and oral dialogues to understand and challenge pre-service teachers' reflections. *Teaching and Teacher Education*, 13 (2), 199-213.
- Moon, J. A. (2006) *Learning Journals. A handbook for reflective practice and professional development*, London: Routledge.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62 (3), 307-332.
- Parkinson, P.T. (2009). Field-based pre-service teacher research: facilitating reflective professional practice. *Teaching and Teacher Education*, 25(6), 798-804.
- Richardson, V. (1989). The evolution of reflective teaching and teacher education. In R. Clift, W. R. Houston, & M. Pugach (Eds.), *Encouraging reflective practice: An examination of issues and exemplars*. New York: Teachers College Press.
- Saylag, R. (2012). Self-reflection on the teaching practice of English as a second language: becoming the critically reflective teacher, *Procedia - Social and Behavioral Sciences*, 46, 3847 – 3851
- Shoffner, M. (2009). The place of the personal: exploring the affective domain through reflection in teacher preparation. *Teaching and Teacher Education*, 25, 783-789
- Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Temple Smith
- Schön, D.A. (1987). *Educating reflective practitioner*. U.S.A: Jossey-Bass Publishers.
- Sass, T. R. (2007, October). *The Determinants of Student Achievement: Different Estimates for Different Measures*. Paper presented at the first annual CALDER research conference, Washington, D.C.
- Thompson, E. (2011). *Précis of Mind in Life: Biology, Phenomenology and the Sciences of Mind*. *Journal of Consciousness Studies* 18 (5-6): 10-22.

- Tubbs, N. (2006), From Reflective Practitioner to Comprehensive Teacher, *Educational Action Research*, 8(1), 167-178
- Urzua, A. & Vasquez, C. (2008). Reflection and Professional identity in teachers' future-oriented discourse, *Teaching and Teacher Education*, 24, 1935-1946.
- Varela, F. (1987). Laying down a path in walking. In W. Thompson (Ed.), *Gaia: A way of knowing*. (pp. 48-64). Hudson, NY: Lindisfarne Press.
- Vidmar, D., J. (2006). Reflective peer coaching: Crafting collaborative self-assessment in teaching, *Research Strategies*, 20, 135-148
- Watts, M. & Lawson, M. (2009). Using Meta -analysis activity to make critical reflection explicit in teacher education. *Teaching and Teacher Education*, 25, 609-616.
- Williams, M., & Burden, R. L. (2000). *Psychology for language teachers: a social constructivist approach*. United Kingdom: Cambridge University Press.
- Wolfsenbeger, B., Piniel, J., Canella, C. & Kyburz-Graber, R. (2010). The challenge of involvement in reflective teaching: Three case studies from a teacher education project on conducting classroom discussions on socio-scientific issues. *Teaching and Teacher Education*, 26, 714-721
- Yaman, S. (2004). *An action research study on teacher development: A constructivist approach*. Unpublished Doctoral Thesis. The University of Cukurova, Adana.
- Yesilbursa, A. (2013). *Construct Validation of the English Language Teaching Reflective Inventory with a Sample of Turkish University EFL Instructors*. *English Language Teaching Journal*, 6 (5), 28-37
- Zeichner, K.M., Liston, D.P. (1996). *Reflective teaching: an introduction*. Lawrence Erlbaum Associates, Mahwah, New Jersey.

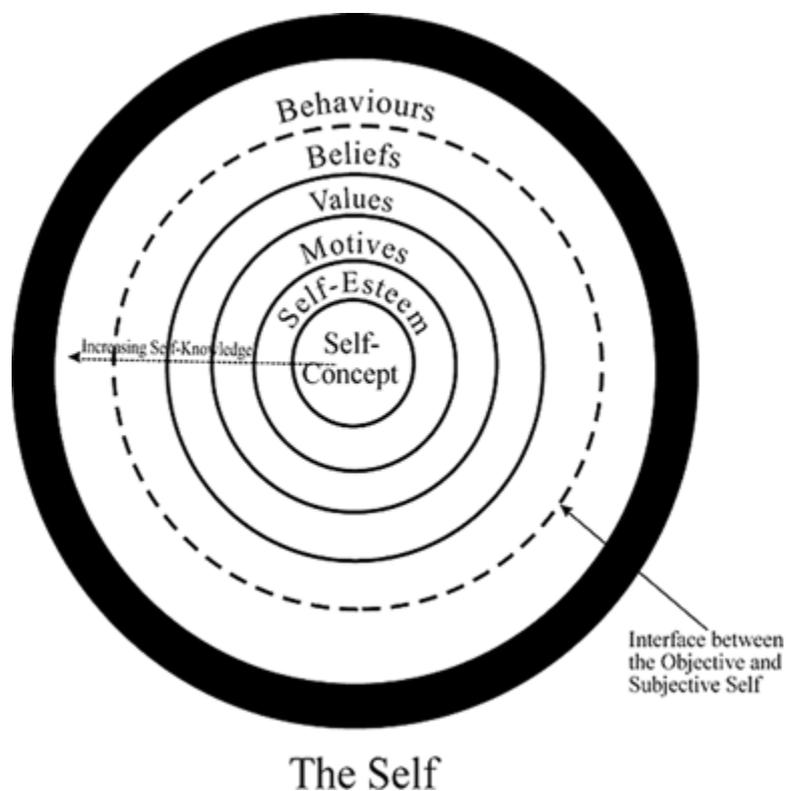


Figure 1. Branson's (2009) proposed diagrammatical representational model of the various components of the *Self*

**Table 1:** Correlations

		Practical	Cognitive	Affective	Metacognitive	Critical	Moral
Teaching Exp.	Pearson Correlation	-.337**	-.129*	-.046**	-.207	.118*	-.025
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	N	179					

**Table 2.** Descriptive Statistics

	Mean	Std. Deviation
Teaching exp.	4.29	1.235
Practical	14.2	3.6
Cognitive	13.7	4.5
Affective	27.1	5.4
Metacognitiv	19.08	3.5
e		
Critical	16.12	4.2
Moral	3.37	1.2

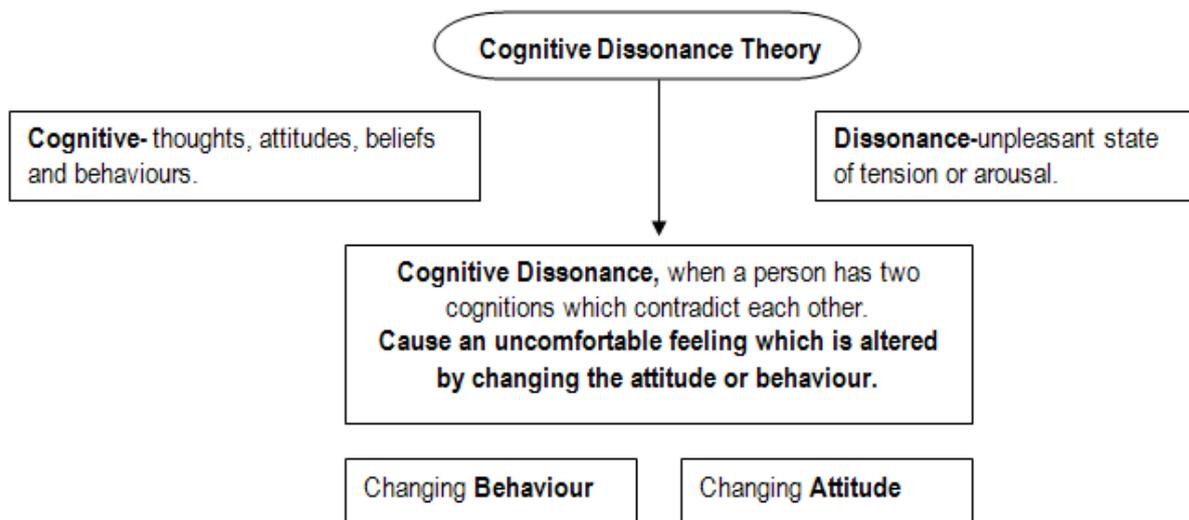


Figure 2. Cognitive Dissonance Theory