

# Transpersonal Education: A 360° Mixed-Methodological Investigation into the International Validity of the Construct

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## Abstract

'Transpersonal education' aims to unite the domains of human experience (i.e. cognitive, affective, psychomotor), through a series of principles and practices to promote individual, and in turn societal, transformation [1, 2]. Although the foundation of transpersonal education dates to the late-1960s/early-1970s, the field has remained relatively obscure until recently [3]. Through an hermeneutic revision, transpersonal education has been reframed to encompass national and international perspectives [4]. This revision has been developed from theoretical exploration of original literature; consequently the question of validity of the concept may be questioned.

The research within this paper sought to ascertain whether the revised focus of transpersonal education was valid through a 360° mixed-methodology approach [5].

From the results, the revision of transpersonal education (specifically the policies, principles, and practices) appeared valid as a construct. Consequently, transpersonal education is offered as a model to promote further investigation and discussion from a cross-cultural perspective for continued personal and societal transformation.

## 1. Introduction

Transpersonal psychology has been a developing field within psychology over the past forty years stemming from the humanistic psychology of Maslow, Rogers, etc. [6]. Three themes within transpersonal psychology have been defined by Hartelius, Caplan and Rardin: beyond-ego psychology, integrative/holistic psychology, and the psychology of transformation [7]. From this definition, transpersonal psychology aims to positively transform humanity (individually and collectively) through examining what contributes to human transcendence, wholeness, and transformation [8].

Although transpersonal psychology has been applied to a number of areas (e.g. counseling, psychotherapy, coaching), there has been a paucity

of research relating to education [9], despite several authors advocating that this is an area of significant future inquiry [10, 11]. In a previous study, Buckler adopted an hermeneutic approach to define transpersonal education: this included an analysis of previous research into the area, while offering a revised focus for the present context [12]. From this research, a series of policies, principles, and practices were advocated. In relation to policy, transpersonal education should synthesise the various domains of human experience, integrating the cognitive, affective, and psychomotor domains which have traditionally remained separated [13]. Furthermore, education should be a process of facilitation ensuring that educators (teachers, parents, etc.) aim to encourage effective inter-, intra-, and trans- personal communication [14].

From the literature, a series of specific and general principles have been identified [Figure 1]. These principles have been advocated by various authors associated with the transpersonal [15-19] and are arguably central to the development of transpersonal education.

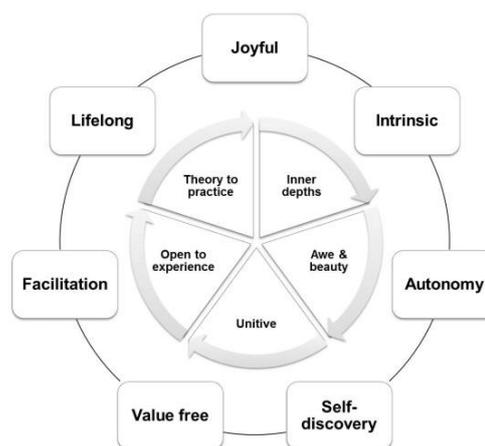


Figure 1. The general principles of transpersonal education (outer ring) and specific principles of transpersonal education (inner ring)

The seven 'general principles' may be deemed the processes of transpersonal education, whereby

such an approach adheres to what may be considered effective educational practice. The five 'specific principles' provide a scope for how the transpersonal may be experienced. Indeed, any practise which can promote one or more of the specific principles could be adopted within transpersonal education. Furthermore, the general principles may be deemed as the foundation from which the specific principles develop.

A series of transpersonal practises have been identified which may promote the specific principles of transpersonal education. These practises are what Walsh refers to as 'perennial' in nature [20]: practises that are recognised cross-culturally [Figure 2]. An additional practise for inclusion is to promote the 'plateau experience', a characteristic trait of self-transcendence proposed by Maslow [21]. The plateau experience consists of three attributes: serenity, mindfulness, and a unitive perception [22]. Specifically Maslow notes that the characteristic practices to facilitate the plateau experience may be taught to children [23].

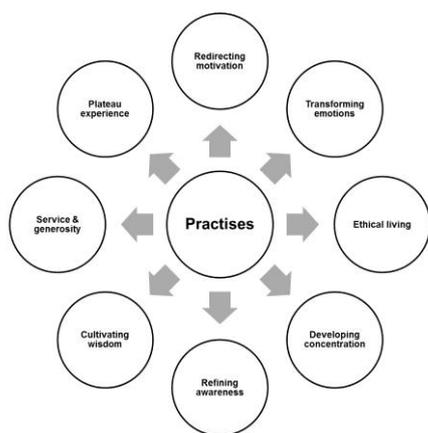


Figure 2. Transpersonal practises

Such practises as discussed by Walsh are not exhaustive in nature: in relation to transpersonal education, any practise which adheres to the specific principles previously discussed may be adopted.

Buckler asserts that the themes within transpersonal education are not new or unique. Indeed many of the themes resonate with educational practitioners, however Buckler has attempted to synthesise existing work to promote a twenty-first century vision of transpersonal education: one which may develop greater integration between cultures and countries [24]. This conclusion however is only an *a priori* assumption: the question central to this paper is whether transpersonal education is purely a theoretical musing, or whether there is potential to develop further research within this area through establishing the validity of the concepts proposed.

## 2. Methods

From the hermeneutical development of transpersonal education (defined in the introduction), an investigation was conducted to determine the validity of the concept. If the concept of transpersonal education has validity, a representative sample should either confirm or refute the proposed theoretical definition of the policy, principles, and practises. Furthermore, as the construct of transpersonal education is multidimensional in nature, a methodological approach was required to explore whether additional properties could emerge that had not previously been considered.

One epistemological approach that would allow for emergent properties of transpersonal education to be identified is that of complexity theory. Indeed, complexity theory is an approach concerned with the evolution, adaptation, and development of new knowledge from an interaction of the component elements [25, 26].

Although complexity theory investigates the development of new knowledge, a pragmatic approach is additionally required to define how such research may be conducted [27]. Such a pragmatic, systematically-structured approach is that of mixed methodology (synonymously referred to as 'mixed methods' research) [28].

Mixed methodology is a developing research perspective, combining both quantitative and qualitative elements, where the strengths of one approach counteract the deficiencies within the other: this in turn provides a more developed understanding than either approach could provide alone [29, 30]. Mixed methodology does however have a number of limitations, fundamentally the confusion between the way in which research components should be integrated [31, 32]. Teddlie and Tashakkori therefore suggest that an approach is adopted which is most appropriate for the research design, or to create a new design [33]. Such a new design is presented in Figure 3, the '360° mixed methodology' approach [34].

Within this approach, the theoretical focus is determined through an exploration of the literature to produce a model or themes for further investigation. Such themes or models are initially investigated through an exploratory phase to ascertain whether the theoretical perspectives are relevant for further investigation. This is achieved through adopting a quantitative stance, for example, the use of questionnaires.

From the results of the exploratory phase, themes are developed which can be subsequently investigated through the explanatory phase (a phase which attempts to explain the reasons for the results from the exploratory phase). This explanatory approach utilises qualitative data collection techniques, for example, observations or interviews.

Both the exploratory and explanatory research phases are analysed through a wider context, where the results are correlated to the theoretical focus to either confirm or refute the model or themes. Additionally, new themes may be ascertained from the results which in turn may promote additional research.

There are obvious links between the 360-degree mixed methodological approach and action research, for example, the findings inform future research directions. However while action research seeks to improve practice, the 360° mixed methodological approach seeks to improve theory.

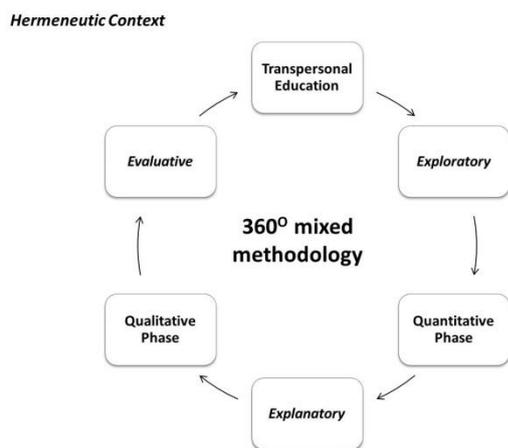


Figure 3. The 360° mixed method approach

From the introduction within this paper, transpersonal education has been defined through an hermeneutic exploration and analysis of the literature. The exploratory or quantitative phase of the research consisted of the development of an online questionnaire which was embedded within a website [35]. The website provided the participant with a background to transpersonal education along with a rationale for the research, links to previous publications, and an ethical statement.

A convenience sample of 101 participants were identified and approached through e-mail, providing a brief overview of the research while inviting them to visit the website and participate. The sample consisted of an international audience of educators who had contributed to the London International Conference on Education (LICE-2011) [36]. Similarly a national convenience sample from the United Kingdom were identified and approached through e-mail for comparative purposes.

The questionnaire was structured into five sections: the first to ascertain demographic information (location, role, and years within education); the second section exploring the extent to which the aims of transpersonal education are relevant (the various domains within the area); the third section explored the principles of transpersonal

education while the fourth section explored the practises. The final section asked respondents about how such practices could be incorporated within the curriculum.

In relation to the explanatory or qualitative phase of the research, two approaches were adopted. The first invited questionnaire respondents to elaborate further on their responses, either through answering supplementary questions and/or through e-mail dialogue. Secondly, respondents were invited to discuss the themes of transpersonal education further through a semi-structured interview.

### 3. Results

As previously discussed, an online questionnaire was used to inform the discussion of the relevance of transpersonal education. The questionnaire was presented to an international and a national sample. Following an initial one-way analysis of variance (ANOVA), no significant differences were discovered between the international and national sample for the respective areas of transpersonal education (the policies, principles and practises). Each of these areas is subsequently discussed in relation to the exploratory and explanatory phases in Section 3.3, 3.4, and 3.5 respectively.

#### 3.1. Population sample

Internationally, a total of 37 respondents completed the questionnaire (37% response rate): from this, the sample represented twelve countries across five continents (Africa, 24%; Asia, 20%; Australasia, 6%; Europe, 38%; North America, 11%). The majority of respondents were classified as 'academic' ( $n=31$ ), with others classified as 'administration' ( $n=6$ ), 'student' ( $n=2$ ), researcher ( $n=3$ ) and 'other' ( $n=4$ ). The years of educational experience within the sector ranged from 3 to 45 ( $M=21.24$ ,  $SD=10.64$ ).

In comparison, a sample of 21 respondents from the UK completed the questionnaire (26% response rate). The years of educational experience within the sector ranged from 5 to 44 ( $M=23.81$ ,  $SD=11.25$ ).

Collectively 58 participants responded, with experience ranging from 3 to 45 years ( $M=22.17$ ,  $SD=10.84$ ).

#### 3.2. Reliability of questionnaire

Excluding the demographic questions, a further twenty-two items were included on the questionnaire. According to Pallant, the Cronbach alpha coefficient should be more than .7 if a scale is reliable [37]. From conducting statistical analysis, the Cronbach alpha was .88, thus indicating that the questionnaire was reliable.

### 3.3. Policies

Three questions sought to assess the extent to which respondents agreed/disagreed to the extent that the human domains (cognitive, affective, and psychomotor) are addressed within their education system: specifically whether their education system a) equally promoted the domains; b) united the domains; and c) should continue to unify the domains. The results are presented in Table 1.

Table 1. Policies

Question	Agree/ strongly agree (%)	Mean	Std. Dev.
Promotes domains equally	54	3.24	1.1
Unites domains	31	2.19	1.1
Continue to unify	91	4.50	.96

Although the results indicate that just over half of the respondents agreed that their education system promoted the three domains, few education systems actually attempt to unite the domains. Interestingly, the majority of respondents reported that their education system should continue to develop the unity between the domains.

From a qualitative perspective, it appeared that the cognitive domain is explicitly emphasised at the expense of the psychomotor and affective domains. This is illustrated through a North African respondent who states, 'there is emphasis on rational thought but not much is lent to the role of emotion or the 'heart' ...emotional engagement is key for developing cognitive faculties'. This view is similarly shared by a UK respondent who comments, 'it is my belief that the cognitive domain is given far too much emphasis which negates and neglects the affective and psychomotor elements of humanity'. A further respondent from South-East Asia reported that although 'there is a framework for achieving an equal development of mind, body and spirit...there is a huge gap, or more like a disconnect'.

The question thus arises as to the extent to which the sample are empowered to facilitate change within their respective education systems, or whether respondents are essentially disempowered in relation to their government's curriculum focus.

### 3.4. Principles

The general principles for transpersonal education were provided to the respondents, again to assess the extent to which they agreed/disagreed that such principles should be central to the concept. The reason for only assessing respondents' perspectives on the general principles was due to the general

principles serving as the foundation from which the specific principles are developed. By this, if the general principles were deemed questionable in relation to validity, this would have a direct impact on the validity of the specific principles. The results are presented in Table 2.

Table 2. Principles

Question	Agree/ strongly agree (%)	Mean	Std. Dev.
Autonomy	98	4.6	.67
Self-discovery	97	4.7	.68
Theory to practice	93	4.6	.75
Relate to environment	93	4.6	.8
Experiential	93	4.6	.82
Relate to others	91	4.6	.81
Joyful	91	4.5	.82
Value-free	60	3.6	1.14

From the table, it is evident that a high majority of respondents strongly agreed that the *a priori* principles identified through transpersonal education literature should be principles for educational practice. The only exception being that education should be value-free. This is explained by one respondent's comment that it may not be possible to ensure a value-free education as 'all educators bring with them their own values which inevitably subconsciously or consciously influence'. Another respondent reported that education must have some form of values, for example, 'freedom of thought/opinion, tolerance of difference'.

Respondents were also invited to provide other principles that they considered as central to education. Such qualitative comments could arguably be grouped under the previously identified principles, for example, 'culturally responsive teaching' may be synonymous with 'relate well to others' and 'relate well to the environment'. Additionally, the responses that education should promote 'pro-social behaviour', 'social responsibility', 'discouraging ethnocentric tendencies', and 'community integration' may similarly be synonymous with the aforementioned principles of relating well to others and the environment. A respondent from South-East Asia specifically reported the importance of such relationships, commenting that 'one dominant theme comes to mind: respect for elders and traditions'.

Further suggestions would require additional exploration: for example, both 'incorporating child-friendly situations' and 'creativity' may be multifaceted in nature, yet they could similarly relate to some of the principles initially identified within transpersonal education such 'joyful', 'experiential', and 'self-discovery'.

In summary, the general principles of transpersonal education appear valid both from a quantitative perspective and from a qualitative perspective. Furthermore, although other principles were suggested, many are either synonymous with those already identified, or multifaceted in nature whereby suggestions relate to two or more of the general principles identified through the theoretical discussion of the literature.

### 3.5. Practises

The practises integral to transpersonal education have been identified through adopting Walsh's suggested activities [38] while additionally including self-transcendence as characterised by the plateau experience [39]. The results are presented in Table 3.

Table 3. Practises

Question	Agree/ strongly agree (%)	Mean	Std. Dev.
Cultivate wisdom	95	4.5	.73
Self-transcendence	91	4.4	.78
Living ethically	90	4.5	.84
Refining awareness	88	4.3	.8
Transforming emotions	85	4.3	.91
Service & generosity	81	4.1	.87
Redirecting motivation	66	3.8	.94
Developing concentration	60	3.5	1.17

The results indicate that all of the identified practises should be utilised within the education system with the majority of respondents indicating that they either agree or strongly agree with the inclusion of such practices.

A possible explanation for the lowest two practises, 'redirecting motivation' and 'developing concentration' may relate to their synonymous interpretation with other practices. By this, 'redirecting motivation' could have been subsumed through developing 'service and generosity', while 'developing concentration' may similarly have been related to 'refining awareness'.

Respondents were invited to suggest other practises that could be included: these ranged from studying yoga, meditation, and the martial arts, through to choral recitation, self-reflection, the Malaysian 'Adab' or 'personal refinement', the Maori 'Mauri Ora' of 'holistic wellbeing', and the Japanese 'Shinrin-yoku' (or 'forest bathing', taking in the atmosphere of a forest).

Further explanation was sought to identify why such practises were deemed important. One North African respondent commented that '...these [practises] are important in a post-modern age where we know that we [are] being manipulated by those who were supposed to educate us. We need to

reclaim our own 'agency' so that we can recreate a better world'.

In summary, from both a quantitative and qualitative perspective, the practises appear valid, however it must be noted that the examples of practises provided are not an exhaustive or a prescriptive list. Arguably, any practise which enables the individual learner to experience one or more of the specific principles of transpersonal education (to explore inner depths, to appreciate a sense of awe and beauty, to develop a unitive perspective, being open to experience, and uniting theory to practice) could be advocated.

### 3.6. Transpersonal education within the curriculum

The final area of the questionnaire required respondents to sequence three options for the inclusion of transpersonal practises within their education system. Specifically respondents were asked whether such practises should be incorporated within existing subjects, incorporated as additional subjects, or that the curriculum should be rewritten. From the results, incorporating transpersonal practises as an additional subject reported the highest mean ( $M=2.34$ ,  $SD=.66$ ), with a curriculum rewrite as the next preferred option ( $M=2.17$ ,  $SD=.86$ ), finally incorporating transpersonal practises within existing subjects as the least preferred option ( $M=1.48$ ,  $SD=.67$ ).

The reported reasons for the order demonstrated the way that transpersonal practises are perceived as isolated in nature, lacking a direct link with existing curriculum subjects. This is illustrated by a respondent reporting that they use meditation with their students before the school day begins to calm the mind and develop a focus for the lessons ahead. Another responded that '...the uniqueness of the [transpersonal] practises would be difficult to embed within the curriculum because it [the curriculum] is overprescribed'. They proceed to comment that teachers may not have the requisite personal development to teach such practises, and that as a single subject, it would be possible to provide a greater coherence.

A further respondent reported that if the practises are not assessed, there would be no room for them within the existing curriculum and that for this reason, transpersonal education, '...would have to remain as a separate subject, after all how do you assess 'wisdom'? How would you, or should you, actually compare one student with another in relation to the way they live ethically?'

An alternate perspective was provided by a different respondent who illustrated how developments such as 'Forest School' already encompass several of the transpersonal practises. By this, they highlighted the way in which concentration

is an outcome of a child's intrinsic motivation when engaged in den-building or making fires, also that refining awareness is inherent through the Forest School approach in the way a child understands the connectivity within nature.

Given the response to the way transpersonal education could be incorporated, the development of a specific subject would appear to be the preferred option from both a quantitative and qualitative perspective. However from a qualitative perspective, there are examples of how transpersonal education could be encompassed within existing curriculum subjects, depending on what these are.

#### 4. Conclusions and Future Work

From the research presented within this paper, transpersonal education would appear to be a conceptually valid area for further development. Indeed, the policies, principles, and practices for transpersonal education resonate across the international and national samples.

In relation to the policies of transpersonal education, the research indicated that the cognitive domain is the predominant area across education systems, although there is a strong indication that the affective and psychomotor domains should be equally developed and the three domains united where possible. However, despite the policies of transpersonal education resonating with respondents, there would appear to be a lack of autonomy to develop or facilitate this within their own education system. This issue may similarly explain why transpersonal education was advocated as a separate subject opposed to being embedded in existing curriculum subjects or as part of a curriculum rewrite.

The general principles of transpersonal education appear to be valid through both research phases. Although such principles may be considered as models of good practice within education, the prevalence of the findings demonstrates the parallels between different countries and cultures. Indeed there are parallels between the principles of transpersonal education authors cited forty years ago and relatively new areas such as 'self-determination theory' [40]. The component principles of self-determination theory consist of developing a sense of autonomy, control, and effective learning relationships. Within transpersonal education, autonomy exists. Self-discovery and intrinsic learning relate within transpersonal education relate to control within self-determination theory. Furthermore, the emphasis on ensuring that education is a process of facilitation and joyful resonates with the development of effective learning relationships within self-determination theory.

Given that the general principles of transpersonal education appear valid, the specific principles based

can subsequently be explored further in future research to investigate their validity. If the specific principles are valid, this will inform a wider discussion as to what may be deemed transpersonal practises, even though the practises discussed through this research appear valid in nature.

Given the sample size, it is not possible to generalise the findings further, although the questionnaire indicates that it could be reliably used with a far larger representative sample. Unfortunately global discussion forums where such research can be advocated are limited in nature. A further limitation is that the questionnaire was only provided in English. Although subsequent interpretation of the questionnaire is advocated, there may potentially be a loss of the conceptual and contextual focus with such translation. Of course, it is similarly possible that respondents within this paper used translation software to understand the questionnaire.

As a developing methodology, the 360° approach enabled transpersonal education to be analysed from an hermeneutical perspective, comparing themes from forty years ago and considering their relevance today through an exploration and explanation of research. Consequently, the approach is advocated for further hermeneutic research.

Despite this research demonstrating the validity of transpersonal education, it could be asked as to why transpersonal education is required. If educators return to their personal philosophy as to why they are involved with their profession, would the prevalent answer be, 'to ensure my students get good grades', or would it be something other than this? Have respective education systems eroded the idealistic educational philosophy of successive generations of student teachers?

Given current global obesity levels, or levels of anger, frustration, and tension, the affective and psychomotor domains may need to be revisited within education. Furthermore, if a more ethical, unitive emphasis was encouraged through education with less emphasis on competition and materialism, would the global financial crisis have occurred? These are, of course, purely musings however the focus of transpersonal education instrumentally must focus on ways of facilitating personal transformation of the individual. Through this, the individual may be able to transform society in some small way.

It is hoped that this paper continues to promote discussion of transpersonal education, similarly encouraging a process of continued reflection of the comparative similarities in championing the human spirit on a cross-cultural level.

## 5. References

- [1, 16] Moore, T.W. (1975). Transpersonal Education: A Preview. *Journal of Education*, 157:4, 24-39.
- [2, 17] Roberts, T. and Clark, F.V. (1976). 'Transpersonal Psychology in Education'. In Hendricks, G. and Fadiman, J. (Eds.) (1976). *Transpersonal Education: A Curriculum for Feeling and Being*. Englewood Cliffs: Prentice-Hall (3-23).
- [3, 10, 15] Rothberg, D. (2005). Transpersonal Issues at the Millennium. *Transpersonal Psychology Review: Special Issue*, Winter 2005, 81-102, (p. 89).
- [4, 9, 12, 24] Buckler, S. (2012). An Hermeneutic Analysis of Transpersonal Education: Policies, Principles and Practices. *Literacy Information and Computer Education Journal (LICEJ)*, Volume 3, Issue 1, March 2012, pp. 560-567.
- [5, 34] Buckler, S. (2011). *Wing Chun Kuen: History, Philosophy, Psychology*. Saarbrücken, Germany: Lambert Academic Publishing.
- [6] Maslow, A.H. (1987). *Motivation and Personality: Third Edition*. Delhi: Pearson Education, Inc. (p.293)
- [7, 8] Hartelius, G., Caplan, M. and Rardin, M.A. (2007). Transpersonal psychology: Defining the past, divining the future. *The Humanistic Psychologist*, 35(2), 135-160.
- [11] Cunningham, P.F. (2006). Transpersonal Education: Problems, Prospects and Challenges. *The International Journal of Transpersonal Studies*. 25, 62-68.
- [13] Bloom, B.S., Engelhart, M.D., Furst, E.J., Hill, W.H., and Krathwohl, D.R. (1956). *Taxonomy of educational objectives: the classification of educational goals*. New York: Longmans.
- [14] Weinhold, B.K. (1975). 'Transpersonal communication in the classroom'. In Hendricks, G. and Fadiman, J. (Eds.) (1976). *Transpersonal Education: A Curriculum for Feeling and Being*. Englewood Cliffs: Prentice-Hall (123-150).
- [18] Maslow, A.H. (1971). *The Farther Reaches of Human Nature*. London: Penguin Books.
- [19] Rogers, C.R. (1961). *On Becoming A Person: A Therapist's View of Psychotherapy*. London: Constable.
- [20, 38] Walsh, R. (1999). *Essential Spirituality: The 7 Central Practices to Awaken Heart and Mind. Exercises from the World's Religions to Cultivate Kindness, Love, Joy, Peace, Vision, Wisdom, and Generosity*. New York: John Wiley & Sons, Inc.
- [21, 23] Krippner, S. (Ed.) (1972). The Plateau Experience: A.H. Maslow and Others. *Journal of Transpersonal Psychology*, 2:2, 107-120.
- [22, 39] Buckler, S. (2011). *The Plateau Experience: Maslow's Unfinished Theory*. Saarbrücken, Germany: Lambert Academic Publishing.
- [25] Morrison, K. (2008). Educational Philosophy and the Challenge of Complexity Theory. *Educational Philosophy and Theory*, 40:1, 19-34
- [26] Mason, M. (2008). *Complexity Theory and the Philosophy of Education*. *Educational Philosophy and Theory*, 40:1, 4-18.
- [27] Greene, J.C. (1994). Qualitative Program Evaluation: Practice and Promise. In N.K. Denzin, and Y.S. Lincoln (Eds.), *The Handbook of Qualitative Research*. Thousand Oaks: Sage.
- [28] Tashakkori, A. & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches. Applied Social Research Methods Series, Volume 46*. London: Sage Publications Ltd.
- [29] Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers (Second Edition)*. Oxford: Blackwell Publishing.
- [30] Creswell, J.W. & Plano Clark, V.L. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks: Sage Publications, Inc.
- [31] Teddlie, C. & Tashakkori, A. (2003a). Major issues and controversies in the use of mixed methods in the social and behavioural sciences. In A. Tashakkori & C. Teddlie (Eds.) *Handbook of Mixed Methods in Social and Behavioural Research*. London: Sage Publications, Ltd.
- [32] Bryman, A. (2008). Why do Researchers Integrate/ Combine/ Mesh/ Blend/ Mix/ Merge/ Fuse Quantitative and Qualitative Research? In M.M. Bergman (Ed.) *Advances in Mixed Methods Research: Theories and Applications*. London: Sage Publications Ltd.
- [33] Teddlie, C. & Tashakkori, A. (2009). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches*

*in the Social and Behavioural Sciences*. London: Sage Publications, Ltd.

[35] Buckler, S. (2012). *Transpersonal Education*. [Online] Available from: [www.transeducation.info](http://www.transeducation.info). [Accessed 31<sup>st</sup> July 2012].

[36] Shoniregun, C.A. and Akmayeva, G.A. (eds.) *London International Conference on Education (LICE-2011)*. Thistle Hotel, Heathrow, Infonomics Society. 7-10 November 2011.

[37] Pallant, J. (2010). *SPSS Survival Manual: Fourth Edition*. Maidenhead: Open University Press.

[40] Deci, E.L. and Ryan, R.M. (1985). *Intrinsic Motivation and Self-Determination in Human Behaviour*. New York: Plenum.