Participatory Educational Research

Participatory Educational Research (PER)

Volume 1, Issure 2
December 2014

Participatory Educational Research (PER)

REVIEWER OF THE ISSUE

TABLE OF CONTENTS

Learning How to Learn:
A Six Point Model for Increasing Student Engagement

Gail Caruth[*]

Adjunct Faculty, Department of Educational Leadership at Texas A&M University-Commerce, USA

Students in higher education are being taught pedagogically. Moreover, pedagogy has long persisted as the basis for the entire educational system. Education is, however, discovering that adults learn differently than children learn even though they have been taught as children were taught. Students tend to behave dependently when they are in a structured, pedagogical educational setting. This dependent behavior may be because these learners do not know how to learn, they only know how to be taught. In pedagogy, the instructor is in charge and held entirely responsible for all learning: what is to be taught, how it is to be taught, when it is to be taught, how it is to be measured, etc. Adult students need to be taught how to learn in order to become life-long, autonomous learners. Research demonstrates that adult students being taught andragogically become engaged in the learning process. They are ready for learning, learn more, experience more meaningful learning, and enjoy learning. This paper presents a six point plan for promoting engagement for students in the college classroom: create a safe environment for learning; ask students what they need to know; explain why students are learning certain concepts, theories, skills, etc.; provide real-life learning opportunities; offer opportunities for collegial collaboration; and have students evaluate their own learning. Collaboration between educators on the six points will also increase the likelihood of engaging students. Student engagement leads to improved retention and ultimately to student success.

* Correspondence: 1876 Oak Bend Drive Rockwall, Texas 75087 972-771-2371 gaildianna@flash.net

Introduction

Getting a college education pays over a million dollars more over a lifetime as opposed to not getting a college degree. Even though evidence demonstrates many additional personal benefits for earning a college degree (Tinto, 2012), the graduation rates for students seeking bachelor's or equivalent degrees equalled 38.6 % in four years, 54.3% in five years, and 58.7% in six years in United Sates colleges and universities. The colleges and universities included in these rates are Title IV institutions, those with a written agreement with the Secretary of Education that allows the institution to participate in any of the Title IV federal student financial assistance programs (U.S. Department of Education, n.d.). If higher education is to increase student graduate rates, the focus must be on student engagement in the classroom. Student engagement leads to student retention and student success (Tinto, 2012). Vincent Tinto (2012), recognized for his work in the area of student success stated that "The classroom is the building block upon which student retention is build and the pivot around which institutional action for student retention must be organized" (p. 124). Furthermore, Hu and Wolniak (2013) maintained that social and academic engagement resulted in different effects on career earnings. Males on average, for example, were more engaged academically than females and earned higher salaries.

Malcolm Knowles received the Delbert Clark Award from West Georgia College In 1967. He was an educator of education at Boston University and a general consultant in adult education. The Delbert Clark Award was highly regarded as a national honor in the field of adult education. Knowles, credited with giving renewed meaning to adult education, maintained during his address at the awards banquet that for society to endure continuous learning into adulthood was necessary (Knowles, 1968).

Andragogy, as introduced by Knowles, was the science of teaching adult learners that focused on adults' characteristics of learning. The word *andragogy* was derived from the Greek word *andros,* which means "man" or "grownups" (Knowles, 1968, p. 351) or *agogus* meaning "leader of" (Knowles, Holton, & Swanson, 2011, pp. 59-60), which translates to "the art and science of helping adults learn" (Knowles, 1984, p. 6). As a result of this focus on the characteristics of adult learners, adults should be taught andragogically (Beaman, 1998; Chan, 2010; Clemente, 2010; Clerk, 2012; Forrest & Peterson, 2006; Hadley, 1975; Hughes & Berry, 2011; Kiener, 2010; Knight, 1999; Knowles et al., 2011; Martell, 2011; Tatum, 2010; Taylor, 2010; Taylor & Ruetzler, 2010; Yow, 2010; Zhang, 2009) to facilitate effectively learning.

Understanding Pedagogy and Andragogy

Schools for children were established in Europe to groom young boys for the priesthood during the early 7th century. Educators were accountable for teaching the values and ways of the church. This teaching became known as pedagogy, a word that is derived from the stem "pediatrics" from the Greek word *paeda* which means "child" (Knowles, 1968, p. 351). Ever since the 7th century, pedagogy has endured as the foundation for all education (Knowles, 1990). As such, books on adult education reference the statement "the pedagogy of adult education" still today (Knowles, 1976, p. 37).

Knowles alleged that education was however, experiencing a transition and realized that adults learn in another way than children learn in spite of being educated as children were educated. Knowles further alleged that the curriculum for adults was distinct from the curriculum for children (1968).

Knowles made one important distinction between a pedagog and an andragog:

An ideological pedagog would want to keep me dependent on a teacher, whereas a true andragog would want to do everything possible to provide me with whatever foundational content I would need and then encourage me to take increasing initiative in the process of further inquiry (as cited in Levitt, 1979, p. 53).

According to Knowles (1984), students are inclined to act dependently when in a more structured educational setting. This dependency might be due to the idea that these learners do not know how to learn and only know how to be taught. In pedagogy, the teacher is in control and regarded as totally accountable for all learning: what is to be taught, how it is to be taught, when it is to be taught, how it is to be measured, etc. Adult students need to be taught how to learn in order to become continuous, autonomous learners. The main purpose of education claimed Knowles, is to attain the capacity to inquire and to become life-long learners.

Teaching college and university students andragogcially in the classrooms is not done in higher education (Beder & Darkenwald, 1982; Brookfield, 2006; Gorham, 1985; Harper & Ross, 2011; Knowles, 1968; Knowles, 1976; Hadley, 1975; J. Henschke, personal communication, February 2, 2012; Rose, 2000) in spite of being encouraged to teach adult students andragogically (Anderson, 2007; Beaman, 1998; Chan, 2010; Clerk, 2012; Finn, 2011; Hadley, 1975; Hughes & Berry, 2011; Minter, 2011: Kiener, 2010; Knight, 1999; Ritt, 2008; Tannehill, 2009; Tatum, 2010; Taylor & Kroth, 2009; Taylor & Ruetzler, 2010; Yow, 2010). Consequently, higher education is not fulfilling its purpose to teach adult learners effectively (Brookfield, 2006; Harper & Ross, 2011; Knowles, 1968; Rose, 2000).

Dr. John Henschke, a student and colleague of Knowles (Henschke, 2011b) and chair of the Andragogy Doctoral Emphasis Specialty at Lindenwood University, delivered the eulogy at Knowles' memorial service (Henschke, Winter 97-98). Henschke alleged that hardly any of the andragogical assumptions are being utilized in today's colleges and universities. In fact, much of what is delivered in classrooms is not consistent with the principles of andragogy. Most attempts to employ andragogical principles are incompatible with the assumptions of andragogy. What is being taught does not meet the needs of the learners. Moreover, what is being taught favors higher education, is more in the nature of adult education, and is not in the nature adult learning (J. Henschke, personal communication, February 2, 2012).

A key distinction between pedagogy and andragogy is the impression one has of oneself and the acknowledgment of the characteristics of the learner. For example, children see themselves as being dependent on adults until they begin to make their own decisions for themselves and experience the fulfillment of making those independent decisions. As youth grow into adulthood, they view themselves as independent and self-directed. Andragogy is based on adults' need to be regarded as self-directed adults (Knowles, 1968).

Knowles' Andragogical Model

Before addressing andragogy and Knowles' Andragogical Model (Knowles et al., 2011, p. 63) it might be helpful to first reflect on the term *adult*. The term *adult* can be defined as, (a) when one becomes biologically responsible--the point at which one is able to reproduce; (b) when one becomes legally responsible--the point at which one is able to vote; (c) when one becomes socially responsible--the point at which one can work and marry; or (d) when one becomes psychologically responsible--the point at which one begins to feel

responsible for his or her own life. Psychological independence is significant in adult learning. This sense of independence is gaining self-awareness and self-directedness. This sense of independence is something that develops over time as children mature into adulthood. Research conducted on psychological characteristics of adulthood has centered on internal processes and not the chronological age of adults. In other words, the focus has been more about an ordered hierarchy of development (Merriam, Caffarella, & Baumgartner, (2007).

Knowles' Andragogical Model originally focused on four learning principles which over time developed to six assumptions (Laird, Naquin, & Holton, 2003; Knowles et al., 2011; Merriam et al., 2007). The six assumptions, different from theories of pedagogical methods, include adults' need to know, self-concept, prior learning experience, readiness to learn, learning orientation, and motivation to learn.

Adults Need to Know

Before learning can occur, adults have a desire to know why they need to know a particular skill, ability, knowledge, etc. Accordingly, educators are encouraged to help learners understand why they "need to know" what is being taught. Helping adults understand why they "need to know" something being taught in the classroom results in learning and strengthens the value of learning. This conscience awareness of the value of learning guides learners in realizing for themselves the disparity between what they know and what they should know (Knowles et al., 2011).

Self-Concept

Once adults accept the accountability for their decisions and actions, they have an internal emotional need to be viewed and acknowledge as able to be self-directed. This self-concept of being independent, once understood can introduce challenges for educators. For example, adult learners resist and resent teachers imposing the perception that "learner equals dependent" (p. 65). This perception of dependency and teachers' handling adult learners as dependent creates internal conflict for adults. A predictable reaction to this conflict is to escape, which may account for the high dropout rates in higher education (Knowles et al., 2011).

Prior Learning Experience

Educators are encouraged to remember that adults develop their identities from past experiences, "it is who they are" (Knowles et al., 2011, p. 66). To devalue their experiences would be akin to devaluing them. Personal experiences of adult learners, therefore, might have an effect on education. Collaborative activities such as group discussions, problem solving assignments, simulation exercises, and case studies where peers are helping peers can be effective teaching methods.

Readiness to Learn

Adults are ready to learn what they need to know and do as the need arises in their personal lives. Timing is critical as a result. To invest time in the classroom on learning skills that adults do not think they need to know or can make use of is considered pointless. Learning is more effective if it corresponds with a need to know (Knowles et al., 2011).

Learning Orientation

When it comes to learning adults are problem-centered and learn best in an environment of realistic problems. The focus of problem-centered learning is to facilitate effective problem-solving skills, self-directed learning, collaboration skills, flexibility, and intrinsic motivation. Through collaborative activities and discussions, adults learn to recognize what they already know, what they need to know, where to access new information, how to resolve problems, etc. (Knowles et al., 2011).

Efforts to reduce illiteracy, for example, have been disappointing. The words that students were learning were not the words they used daily. As a result, they were considered pointless and learning them was a waste of time the minds of the learners. However, Knowles et al. (2011) investigated courses offered through extension programs during the evenings that corresponded to courses offered to students earlier in the day. The day courses were Composition I, Composition II, and Composition III and the corresponding evening courses were Writing Better Business Letters, Writing for Pleasure and Profit, and Improving Your Professional Communications. Knowles discovered that students attending day classes memorized the grammar rules while students attending evening classes began writing better business letters and improving their grammar skills.

Motivation to Learn

Adults are motivated to learn externally and internally; however, educational barriers can have a negative effect on motivation for learning (Knowles et al., 2011). Adults are ultimately motivated to learn internally and more effective learning occurs when personal goals, interests, attitudes, and beliefs come from learners rather than the instructor. Thus, the learner is the self-motivator or internal teacher (Knowles, 1975).

Process Design Steps: Strategies for Teaching Andragogically

Knowles suggested approaches for adult learning (Merriam et al., 2007). These approaches can be referred to as eight "process design steps" for creating effective learning. The eight steps are:

(1) Prepare students by providing information, encouraging participation, developing realistic results, and thinking about course content.
(2) Create a climate that is beneficial for students to learn by demonstrating trust, support, collaboration, ability to relax, respect for one another, and pertinent information.
(3) Involve students in planning by shared planning between students and educator.
(4) Involve students in identifying learning requirements and assessments between students and educator.
(5) Involve students in developing learning objectives by mutual negotiation between students and educator.
(6) Involve students in establishing learning plans by joint planning between students and educator through learning contracts and learning activities according to the readiness of students.
(7) Facilitate students in completing learning plans by experiential opportunities, inquiry projects that provide opportunities to use prior knowledge to investigate an issue, and independent study.
(8) Involve students in the evaluation of their learning experiences by mutual planning after assessment information is collected.

In essence, encouraging mutuality and reciprocity in the process design steps encourages student ownership, which is often considered motivational. Once adults feel ownership for their own learning, learning will take place (Laird et al., 2003).

Andragogy in higher education has been slow to come about. Colleges and universities do not teach andragogy to aspiring and promising educators (Brookfield, 2006). There is little empirical research that tests the validity on how much learning is actually gained in spite of andragogy being the recognized method for adult learning, (Merriam et al., 2007; Stagnaro-Green, 2004). Andragogy appears to be making its way gradually into American higher education. Furthermore, evidence indicates a developing use of andragogical assumptions in post-secondary education (Knowles et al., 2011).

Research on Andragogy

In spite of andragogy being considered the principal method of adult learning for over 40 years, there has been minimal empirical research completed on Knowles assumptions (Merriam et al., 2007). Henschke (2011a) alleged that there are 330 published documents on andragogy by different authors. Research on adult education has been not been about the teaching of adults in higher education but in the practice of adult learning in business and industry. What research there is has not been translated into higher education practice and educators are not trained in adult education (Brookfield, 2006; Rose, 2000).

Ann Hartree (1984), a critic of Knowles' assumptions of andragogy, challenged the lack of clarity and general ambiguity. Hartree claimed that the link between adult and child learners is blurred and the six assumptions are nebulous. She also claimed that andragogy's foundation on man's "existence" (p. 208) explains the lack of clarity of whether andragogy is about adult learning or about teaching adults.

It bears mentioning that Knowles (1976) himself acknowledged the need for empirical research on andragogy. He proposed that "mutual inquiry" (p. 15) was needed to continue to define the field of adult education. He further suggested that this mutual relationship of inquiry was "pioneering" (p. 16). It requires cooperation, patience, and collaboration on the part of researchers and that those who want "pat answers, neat categories, and proved theories will be uncomfortable in the climate" (p. 16) of andragogy and adult education as it is.

Self-directed learning (SDL) has created the largest amount of attention, debate, and empirical research within the field of adult education (Knowles et al., 2011; Merriam et al., 2007). Knowles (1975) defined SDL as adults taking responsibility for defining their own learning needs and satisfying those needs. SDL occurs in collaboration with others such as teachers and peers. SDL requires an atmosphere of mutuality and reciprocity between self-directed learners and others. According to Zang (2009), this relationship of mutuality and reciprocity presents an opportunity and a challenge.

According to Henschke (2011a), conversations of andragogy in the future should surpass Knowles' model of andragogy to integrate global viewpoints in the field and bond with other adult learning theories. Continuous study will help to "establish andragogy as a scientific academic discipline" (p. 36). The discipline of adult learning will continue to be questioned. As the debates transpire progress is to be expected in the future research and practice in andragogy (Knowles et al., 2011).

A few examples demonstrating student engagement when adragogical principles are applied

in higher education are presented below:

- Students at one university designed their own degree plans and as a result were better students, understood where learning was headed, experienced academic improvement, and derived pleasure from education (Harper & Ross, 2011).
- Students attending the National Restaurant Association (NRA) Show hosted at four universities welcomed the opportunity to be active in defining their individual learning objectives in a learning contract that was integrated with specific requirements to enhance the educational experience (Taylor & Ruetzler, 2010).
- Law students in Idaho claimed that they became more self-directed, were more receptive to the traditional customs of practicing law when educators applied course content to experiences, were aware of an increase in readiness, felt an orientation to learn, were more motivated to learn, and were more willing to go through the learning process when they were informed about what they would learn and the reasons for learning (Taylor, 2010, p. 185).
- Management education in higher education is more effective for students when using: role-playing because its use of experience gives weight to knowledge; problem-based learning because it allows adults to be self-directed; and service learning because it allows students to express their self-image as civilians in real community problems. Lectures can be an effective instructional method when educators ask students what they need to know because students will be more interested in listening to a lecture on creating a mission statement, for example, when they understand the importance of mission statements to organizations (Forrest & Peterson, 2006).
- Law students felt that they learned more when experienced attorneys discussed practical experiences on the job (Taylor & Kroth, 2009) during lectures.
- Martell (2011) compared the effectiveness of a lecture-based to a discussion-based teaching philosophy in adult bible fellowships (ABFs) in Akron, Ohio. The group that learned under the discussion-based method experienced greater learning, felt more confident with the teaching method, and thought that the discussions were the most memorable part of the lesson.
- According to Beder and Darkenwald (1982) data collected from 173 public school and college teachers indicated that accentuating responsive, learner-centered patterns and de-accentuating power and rules engaged learners.
- Hughes and Berry (2011) claimed that students should be provided opportunities to be involved in making decisions for their own learning methods instead of being hand-fed information. If this collaboration is initiated early in the process, students will appreciate having control of their learning and will demonstrate the value of education.
- Clemente (2010) found that the self-concept of learners moved from dependency to self-directing in multi-generational community college classrooms. As time progressed during the semester, students overcame anxiety, became more at ease with being students, took responsibility for managing their coursework, and found that students' readiness to learn reflected social constructivism, which suggests that students construct more meaning in knowledge gained from personal experience than from learning passively.
- Zhang (2009) claimed that learning is more meaningful if both the educator and the learner (a) shared the responsibility for the design of the learning goals and objectives, (b) interacted with other members of the class, (c) promoted reflection on experiences,

(d) related new examples that made sense to the learner, (e) maintained self-directed learning, and (f) evaluated learning.

- Knight (1999) found that learning and confidence increased when learners are provided with hands-on computer learning opportunities. Allowing students to maintain control of the mouse and the computer keyboard for example, increased learning outcomes. Therefore, it is important that computer programs and manuals be easy to work with and to understand.

- Korr, Derwin, Greene, and Sokoloff, (2012) maintained that students compare learning something new to past experiences to establish new information, consider busy work offensive, separate new learning from their everyday lives, anticipate individualized feedback from educators as opposed to just receiving a grade, and are inspired by relevant problem-solving activities.

- Traditional grading methods need to change for college age students suggested Beaman (1998). Some alternative methods include peer evaluations, self-assessments, praiseworthy grading (pointing out successes rather than failures), and checklists for quality (measurements of the quality of an idea). Praiseworthy grading and checklists for quality provide instructor feedback in a more facilitative manner than with traditional grading approaches.

- Instructors can enhance learning by being available for questions and providing an environment that encourages questions free from criticism and disapproval (Knight, 1999).

- Once learning is internalized, the learner is ready to move on to the next learning experience. Therefore, it is important that educators communicate to learners the impact, method, and implementation of learning and understand that learners have different learning styles and preferences (Clerk, 2012).

In summary, the objective of learning is to permit learners to carry out their learning according to what that learning represents for them. Consequently, learners are learning how to learn. This practice of learning how to learn, over time, facilitates learners' ability to form their own awareness of their truths (Hadley, 1975). Learners begin to know themselves, their capabilities, and their aspirations. This knowledge is immensely important (Knowles, 1984).

Educators are encouraged therefore to instigate discussions with colleagues on teaching and sharing experiences. Unfortunately educators typically employ an assortment of learning theory and practice and may not be cognizant of what method of learning they practice in their classrooms. Educators' teaching methods center on their individual ideas of what is suitable without verifying whether research supports their teaching method (Minter, 2011).

Educators are also encouraged to take into account the needs of the student when designing the curriculum (Knight, 1999). It is necessary to consider that many students experience at least one educational barrier (responsibilities to family, responsibilities to work, responsibilities to community, self-concepts, unattainable opportunities, etc.) in their lifetime (Clerk, 2012; Finn, 2011; Ritt, 2008). As a result of these barriers, students are apt to leave post-secondary education without earning a degree (Clerk, 2012; Tannehill, 2009). For that reason, remembering how important an inviting educational environment (safe, successful, interesting, etc.) is will make up for the challenges and will enhance the likelihood of engaging students (Finn, 2011). According to Tinto (2012), removing barriers leads to success in higher education.

In conclusion, Wasley (2006) maintained that student engagement customarily falls under the

responsibility of the college student affairs area. However, if the purpose for going to college is to obtain an education (Hutchins, 1938) and the purpose of getting an education is to encourage continuous learning (Knowles, 1984), then educators must engage the students in the classroom in order to retain them in colleges and universities (Tinto, 2012). Kuh (2006) claimed that student engagement has a positive effect on student retention. It is through the process of retaining students in higher education that these same students will become society's life-long learners of the future, thereby insuring the very survival of civilization (Knowles, 1968). By facilitating students' ability to learn how to learn rather than by learning how to be taught (Hadley, 1975), student engagement and retention can be accomplished avoiding any reactions to flee the classrooms (Knowles et al., 2011). This learning how to learn can be accomplished through the assumptions of the students' need to know, self-concept, prior learning experience, readiness to learn, learning orientation, and motivation to learn (Knowles et al., 2011).

Learning How to Learn: A Model for Student Engagement
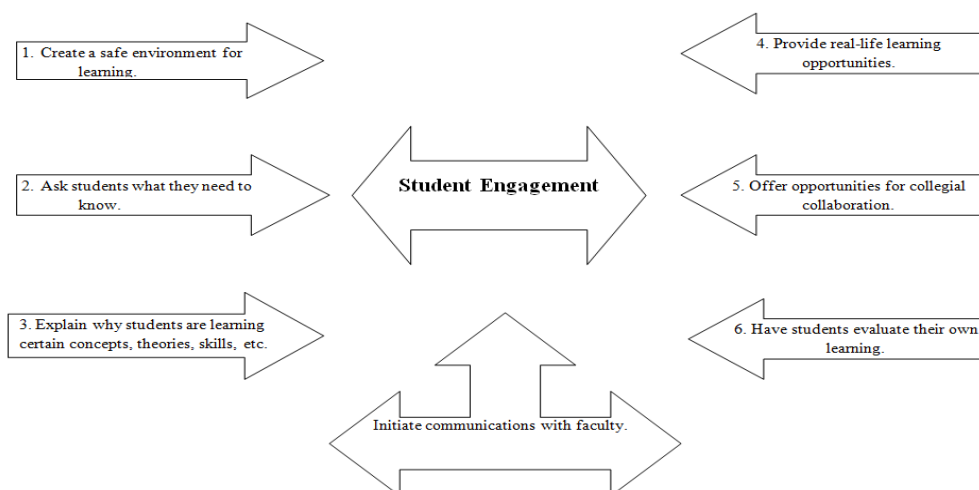
(1) Create a safe environment for learning. Provide an environment that encourages questions free from criticism that is safe, successful, interesting, etc. for students.

(2) Ask students what they need to know. Probe students about what they need to know because they will be more interested in classroom activities and learning is more effective if it coincides with a particular need to learn.

(3) Explain why students are learning certain concepts, theories, skills, etc. Help students learn about the value of learning to realize for themselves that there is a gap between where they are and where they should be. To invest time on learning something that they do not relate to or can make use of is considered pointless. Learning is more effective if it coincides with a particular need to learn

(4) Provide real-life learning opportunities. Establish a learning environment with realistic problems because adults are problem-centered when it comes to learning.

(5) Offer opportunities for collegial collaboration. Introduce group activities and discussions, problem solving assignments, simulation exercises, case studies, etc. in the classroom. Emphasis on peers helping peers on real-life problems enhances students' ability to identify what they already know, what they need to know, where to access new information, how to resolve problems, etc.

(6) Have students evaluate their own learning. Share the responsibility for evaluating learning and designing learning goals and objectives that make sense to students. Help students to become self-directed learners.

Overall alignment of collaboration and cooperation in higher education is "key" (Tinto, 2012, p. 112) for student engagement that ultimately leads to student retention and success in higher education. From that one could assume a seventh point in the model and that is to initiate faculty communication with other faculty through formal and informal meetings sharing insights and experiences. Collaboration between educators on teaching and sharing experiences regarding the six points for engaging students will result in enhancing the likelihood of engaging students.

References

Anderson, J. M. (2007). A conceptual framework of a study in preferred learning styles: Pedagogy or *andragogy* (Unpublished doctoral dissertation). Spalding University, Louisville, Kentucky.

Beaman, R. (1998). The unquiet...even loud, andragogy! Alternative assessments for adult learners. Innovative Higher Education, 23, 47-59. doi:10.1023/A:1022920513341

Beder, H. W., & Darkenwald, G. G. (1982). Differences between teaching adults and pre-adults: Some propositions and findings. Adult Education, 32(3), 142-155. doi:10.1177/074171368203200303

Brookfield, S. D. (2006). The skillful teacher: On technique, trust, and responsiveness in the classroom (2nd ed.). San Francisco, CA: Jossey-Bass.

Chan, S. (2010). Applications of andragogy in multi-disciplined teaching and learning. Journal of Adult Education, 39(2), 25-35.

Clemente, K. A. (2010). Experiences of adult students in multi-generational community college classrooms (Unpublished doctoral dissertation). Pennsylvania State University, University Park, PA.

Clerk, K. (2010). Student perception and success: How adult learners at a two-year technical institution perceive instruction and how their perceptions contribute to their overall academic success (Unpublished doctoral dissertation). Oakland University, Rochester, MI.

Finn, D. (2011). Principles of adult learning: An ESL context. Journal of Adult Education, 40, 34-39.

Forrest, S. P., & Peterson, T. O. (2006). It's called andragogy. Academy of Management Learning & Education, 5, 113-122.

Gorham, J. (1985). Differences between teaching adults and pre-adults: A closer look. Adult Education Quarterly, 35(4), 194-209. doi:10.1177/0001848185035004002

Green, G., & Ballard, G. H. (2011). No substitute for experience: Transforming teacher preparation with experiential and adult learning practices. SRATE Journal, 20, 12-20.

Hadley, H. N. (1975). Development of an instrument to determine adult educator's orientation as andragogical and pedagogical (Unpublished doctoral dissertation). Boston University School of Education, Boston, MA.

Harper, L., & Ross, J. (2011). An application of Knowles' theories of adult education to an undergraduate interdisciplinary studies degree program. The Journal of Continuing Higher Education, 59, 161-166. doi:10.1080/07377363.2011.614887

Hartree, A. (1984). Malcolm Knowles' theory of andragogy: A critique. International Journal of Lifelong Education, 3(3), 203-210. doi:10.1080/0260137840030304

Henschke, J. (Winter 97-98). In memoriam: Malcolm S. Knowles. *Adult Learning, 10451595, 9*(2).

Henschke, J. A. (2011a). Considerations regarding the future of andragogy. *Adult Learning*, Futures Column, 22, 34-37. doi:10.1177/104515951102200109

Henschke, J. A. (2011b). Andragogy and its future, lifelong learning, my relationship with Malcolm S. Knowles, connection between learning and performance, and my commitment to andragogy. An Interview by Monica Fedeli from Italy with John A. Henschke. Fedeli, M. Ph.D, Interviewer and Translator. Journal of the Italian Association for Adult Education; Universita di Padova, Italy; Being Translated into Italian by Monica Fedeli; (In Press). Retrieved from: http://www.lindenwood.edu/education/andragogy/andragogyPublished.html

Hu, S. & Wolniak, G. C. (2013). College student engagement and early career earnings: Differences by gender, race/ethnicity, and academic preparation. The Review of Higher Education, 36(2), 211-233.

Hughes, B. J., & Berry, D. C. (2011). Self-directed learning and the millennial athletic training student. Athletic Training Education Journal, 6, 46-50.

Hutchins, R. M. (1938). Why Go To College? Saturday Evening Post, 210(30), 16.

Kiener, M. (2010). Examining college teaching: A coaching perspective. Rehabilitation Education, 24(1/2), 69-74.

Knight, K. J. (1999). Older adults and technology: A critical incident inquiry into learning experiences (Unpublished doctoral dissertation). Texas A&M University-Commerce, Commerce, TX.

Knowles, M. S. (1968). Andragogy, not pedagogy. Adult Leadership, 16(10), 350-352, 386.

Knowles, M. S. (1975). Self-directed learning: A guide for learners and teachers. New York, NY: Association Press.

Knowles, M. S. (1976). The modern practice of adult education: Andragogy versus pedagogy. New York, NY: Association Press.

Knowles, M. S. (1984). Andragogy in action: Applying modern principles of adult learning. San Francisco, CA: Jossey-Bass.

Knowles, M. S. (1990). The adult learner: A neglected species (4th ed.). Houston, TX: Gulf.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2011). The adult learner: The definitive classic in adult education and human resource development (7th ed.). Burlington, MA: Butterworth-Heinemann.

Korr, J., Derwin, E. B., Greene, K., & Sokoloff, W. (2012). Transitioning an adult-serving university to a blended learning model. Journal of Continuing Higher Education, 60, 2-11. doi:10.1080/07377363.2012.649123

Kuh, G. D. (2006). Underrepresented students benefit most from "engagement." Retrieved from https://tle.wisc.edu/forum/underrepresented-studentsbenefit-most-engagement

Laird, D., Naquin, S. S., & Holton, E. F. (2003). Approaches to training and development (3rd. ed.). New York, NY: Basic Books.

Levitt, L. (1979). Critique: Andragogy revisited II. Adult Education Quarterly, 30, 52-57. doi:10.1177/074171367903000104

Martell, J. (2011). Evaluating the effectiveness of andragogical teaching in adult bible fellowships at The Chapel, Akron, Ohio (Unpublished doctoral dissertation). The Southern Baptist Theological Seminary, Louisville, KY.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). Learning in adulthood: A comprehensive guide (3rd ed.). San Francisco, CA: Jossey-Bass.

Minter, R. L. (2011). The learning theory jungle. Journal of College Teaching & Learning, 8(6), 7-15.

Ritt, E. (2008). Redefining tradition: Adult learners and higher education. Adult Learning, 19(1/2), 12-16. doi:10.1177/104515950801900103

Rose, A. D. (2000). What is the state of adult education research today? Adult Learning, 11(4), 28-29. doi:10.1177/104515959901100410

Stagnaro-Green, A. (2004) Applying adult learning principles to medical education in the United States. Medical Teacher, 26, 79-85.

Tannehill, D. B. (2009). Andragogy: How do post-secondary institutions educate and service adult learners? (Unpublished doctoral dissertation). University of Pittsburgh, Pittsburgh, PA.

Tatum, C.G. (2010). An explanatory mixed methods inquiry into the academic experience of nontraditional community college students (Unpublished doctoral dissertation). Texas A&M University-Commerce, Commerce, TX.

Taylor, B. F. (2010). Raising the bar: A qualitative study of adult learning theory and its effectiveness of law school education in preparing new graduates to begin the practice of law (Unpublished doctoral dissertation).University of Iowa, Iowa City, IA.

Taylor, B. F., & Kroth, M. (2009). A single conversation with a wise man is better than ten years of study: A model for testing methodologies for pedagogy or andragogy [Electronic version]. Journal of the Scholarship of Teaching and Learning, 9(2), 42-56.

Taylor, J., & Ruetzler, T. (2010). A student-centered exploration of the national restaurant association show: Developing a course for academic credit. Journal of Culinary Science & Technology, 8, 1-13. doi:10.1080/15428052.2010.486412

Tinto, V. (2012). Completing college rethinking institutional action. Chicago, IL: The University of Chicago Press.

U.S. Department of Education. (n.d.). National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS). Spring 2012, Graduation Rates component (provisional data), table 121217. Extracted from the IPEDS Data Center http://nces.ed.gov/ipeds/datacenter/ on 12/14/2012; revised on 12/17/2012.

Yow, A. (2010). Employers' perceptions of basic technology skills needed for workplace preparation in adult basic education (Unpublished doctoral dissertation).Walden University School of Education, Minneapolis, MN.

Wasley, P. (2006). Underrepresented students benefit most from engagement. The Chronicle of Higher Education, 53, A39.

Zhang, J. (2009). Exploring education major focused adult learners' perspectives and practices of Web-based distance education in sixteen universities (Unpublished doctoral dissertation). New Mexico State University, Las Cruces, NM.
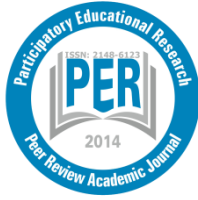
Active and Accountable Social Inquiry: Implications and Examples

Norma RA Romm[*]
University of South Africa

This article is based on my inaugural lecture that I delivered at the University of South Africa on 6 November 2013. The topic of the inaugural lecture was "active and accountable social inquiry" In the inaugural address I focused on what it might mean to practice what I call active as well as accountable social research. I explained the various research contexts in which I, with colleagues, have used the term "active" to characterize research where responsibility is taken for the possible impacts that research endeavours have in the social world of which research is a part. I also indicated that active research implies that one engages research participants in processes of research/inquiry. This engagement implies that the research is not led solely by the initiating researchers, but is a product of a variety of inputs and decisions about the meaning of the research and its potential action implications. The approach to active research that is detailed in this article is pertinent to this journal on Participatory Educational Research, which is aimed at publicizing various efforts on the parts of researchers to develop a more participatory style of inquiry. Active research is one way of developing such a style.

[*] *Address for correspondence: norma.romm@gmail.com*

Use of the Term "Active" to Characterize Research/Social Inquiry
Some Examples of My Use of the Term "Active" in Research Contexts

I first used the term *active* to refer to research approaches when writing an article with a former PhD student who was from Taiwan. His name is Cheng-Yi Hsu. He was one of my students while I was in the UK working at the University of Hull – we had many post-graduate students from all over the world. This student was studying power distance in the Kaohsiung Harbour in Taiwan using as his conceptual starting point Geert Hofstede's book entitled *Culture's Consequences: International Differences in Work-Related Values* first published in 1984.

Hofstede argues that different countries may have different orientations to power distance in the workplace that are related to their national culture. High power distance implies that workers expect those in positions of authority in the workplace to make decisions, and they do not expect to be consulted. Low power distance implies that workers expect a more democratic culture to prevail. Now I suggested to Cheng-Yi that by taking an active approach he *could offer a novel possibility for exploring power distance*, which does not reinforce rigid cultural conceptions.

For example, I suggested that he could explore the ambiguities in the culture and could use this as a basis for seeing whether workers could become more involved in decision-making and where managers might appreciate this involvement. The "activity" on his part meant that as a researcher instead of just attempting to *record* what seem to be the dynamics of interaction between workers and managers, one could explore possibilities for people's reviewing experienced patterns that both parties may find restrictive. This required mediation skills on Cheng-Yi's part, where he acted as mediator in trying to express to each party the others' concerns; and this (it could be argued) opened avenues for shifting somewhat their way of orienting to each other. The article that we wrote subsequent to his PhD was published in 2002 in a management journal called *Omega*. It was entitled "Reconsidering the exploration of power distance: an active case study approach" (Romm & Hsu, 2002, pp. 403-414). Essentially the argument is that research always makes some difference to the way that social outcomes pan out: even research that aims to be neutral (or that strives for so-called objectivity) can easily serve to reinforce existing structures, unwittingly. Active research means that researchers take some responsibility for the way in which their research might impact on the social world of which research is a part, as I summarized this in my book called *Accountability in Social Research* that was published in 2001.

The second time that I used the term "active" was when co-conducting an evaluation of some management training programmes in the East Riding County Council in the UK. The people in charge of the training programmes were interested in what managers had learned and whether they were able to apply what they had learned from the management courses. Again I suggested this time to co-researcher Peter Adman that we could follow a style of interviewing where at the moment of the interview we already could enable managers as well as staff being interviewed to *re-reflect on how they were interacting with each other*. In this case, parallel with the training programme for managers, the organization was implementing a 360 degree feedback scheme where staff had the opportunity to comment on their managers' management style.

When conducting the interviews our aim was not just to "probe" people's experiences of this, but to help them to consider ways in which the training in combination with the feedback system could *serve as an opportunity for strengthening the communicative relationships* that

potentially existed between managers and staff. One article that came out of this research was called "Exploring the complexity of human dynamics within 360-degree feedback processes: the development of (active) qualitative inquiry". This was published in the *Journal of Business and Society* (2004, pp. 170-189).

Our active position that we took was consistent with some arguments that Holstein and Gubrium had been developing around what they called "active interviewing" (as published in a book on this in 1995). They suggested that active interviewing can be characterized as follows:

> Asking the respondent to address a topic from one point of view, then another, is a way of activating the respondent's stock of knowledge... The contradictions and complexities that may emerge from positional shifts are rethought to signal alternative horizons and linkages. (1995, pp. 77–78)

Agreeing with and extending Holstein and Gubrium's understanding, we recognized that the interviewing process in the organization could be used as an occasion to elicit complexities as we discussed the "topics" with people: so that people became (more) aware of different ways of addressing the issues at stake. In this case one of the issues was the question of how trust can be developed via a 360 degree feedback process, rather than it leading to conflict between managers and workers. As people are asked to consider issues from different angles, their horizons become extended rather than univocal visions being reinforced. Again one can see that our aim was to initiate processes of reflection on the part of the participants.

Another occasion in which the same terminology of "active" was employed was in the doing of research that Veronica McKay and I co-organized exploring HIV and AIDS in the informal economy in Zambia (2005-2006). In the case of this write up we together reflected on what made "active research" different from the broader category of action research (and traditional understandings of action research). One of our articles was called "Active research towards the addressal of HIV/AIDS in the informal economy in Zambia: Recognition of complicity in unfolding situations". This was published in 2008 in the journal called *Action Research* (Special Issue on Development).

We stated our position vis à vis action research as follows:

> We did not aim, as Coghlan and Shani suggest for action research inquiry, to set up cycles of inquiry involving "diagnosing, planning action, taking action and evaluating action" (Coghlan & Shani, 2005, p. 534). ... . Rather, we followed what we called a more nuanced view of the transformative possibilities of action research – where trajectories of change cannot be clearly determined as part of the action research remit. (McKay & Romm, 2008, pp. 151-152)

It should also be mentioned that in this project, we used what is called a mixed-method design, using a variety of approaches, including questionnaires, rapid assessment workshops, peer education, and dialoguing with additional stakeholders at a national workshop. But instead of taking these various phases of the research "off the shelf" (as Midgley, 2000, puts it), we (re)worked the various research approaches. These became adapted through infusing each one with a consciously considered intervention component, recognizing again that as soon as one uses "methods" one is making a difference in some way to the manner in which participants and wider audiences will "see" the issues that are being explored.

Using Questionnaires with "Active" Intentions to De-Rigidify Constricted Meaning-Making

Let us consider as one example the way that we used the questionnaire in the Zambian project to try to open for reconsideration that women have little or no say in the decisions re condom use. One of the questions asked people to consider for instance, whether condom use is negotiated. Already by asking this as one option for how decisions re condom use are made, *one raises the possibility that it can become more negotiated.* In other words, already by posing questions in a certain way, one can open up options for seeing (and for action) not previously given attention in terms of restricted cultural expectations.

There are myriads of examples of how questionnaires can easily serve to reinforce rigidified cultural constructions. Some of these I discussed in my book called *New Racism: Revisiting Researcher Accountabilities* (2010). Here I argued that when one uses uncritically terms such as "race" in a questionnaire, one can unwittingly serve to limit people's imagination to thinking that race is a biological or cultural given in societies, with implications for how people regard each other and possibilities for interchange across categorical distinctions.

I will offer an extensive quote from my book on *New Racism* (2010, p. 127) to illustrate this point (where I am also citing a few other authors to emphasize this point, starting with Michael Omi): Here is how I stated it:

> In whatever way the discussion around racialized categorization is opened up, Omi considers it crucial that researchers/analysts display "imagination" in their research work and do not slip into "treat[ing] the category of race in an unproblematic fashion" (2001, p. 260). He thus calls on social scientists to display a sensitivity toward "problematizing race in our work" (Omi, 2001, p. 260).

Milner IV too suggests that in terms of what is called Critical Race Theory (CRT) … researchers are urged to consider the following questions:

> What do my [the] participants believe about race and culture in society and education, and how do they and I attend to the tensions inherent in my and their convictions and beliefs about race and culture in the research process? (2007, p. 395)

Milner IV here remarks that If one leaves in abeyance these questions, and uses the category of "race" without giving participants an opportunity to discuss their views of race, the questions are silenced.

And as Harris-Lacewell comments too, this means that certain notions remain uninterrogated through the way in which the research is formulated (2003, p. 234).

In a recent article in a journal on qualitative-oriented approaches *(International Journal of Qualitative Methods)*, I concentrated on developing further the argument regarding taking some responsibility for the way in which we use categories within questionnaires (Romm, 2013). The article is entitled: "Employing questionnaires in terms of a constructivist epistemological stance: Reconsidering researchers' involvement in the unfolding of social life". As I phrased it there:

> Attempts can thus be made to use questionnaires so that they undermine socially rigidified categories and meaning-making that are unnecessarily limiting in terms of their social consequences. That is, questionnaires can intentionally enable respondents/participants to rethink issues that they may not have considered before and expose them to ways of seeing by asking them to respond to questions phrased in

a certain way. This can also open more spaces for audiences (reading "reports") to re-reflect on issues raised, and to participate in (further) "collective deliberation" (2013, p. 661).

In my book on *New Racism* (2010) I offered some examples of how this can be done with questionnaires which concentrate on an exploration of "race". I suggested that in the questionnaire itself this term can be put in quotation marks and respondents can be asked to reflect on why they think it has been placed in quotation marks. (This would imply creating an open-ended question on this; which means that when the report is written up there is additional information for audiences to consider, rather than seeing race as a "thing" that is given in the social world and that has a univocal meaning.)

Being on the Lookout, no Matter What Methods Are Used, for Ways of Rendering Research More Active

My point is that on all occasions, researchers can and should be on the look-out for ways in which they can render their research more active in the sense of opening up new avenues for thinking and acting on the part of actors in the social world.

This same position re taking responsibility is expressed in an article that I recently co-authored with Norma Nel and Dan Tlale in the *South African journal of Education* (2013). The article is entitled "Active facilitation of focus groups: Co-exploring with participants the implementation of inclusive education". As Norma Nel explained in her recent inaugural, the project was geared to *a* comparative analysis of teachers' roles in inclusive education in Finland, Slovenia, Lithuania, China, England and South Africa – and it consisted of various research phases that were administered across the different countries. I came into the project at the point of the conduct of the focus groups in South Africa, and we decided in this case to ask participants also to offer feedback to us on the sessions. We considered the sessions as active in that right from the beginning we indicated to participants that we were all exploring the issues together and all would hopefully be learning from one another, thus mutually extending our understandings.

The idea was not to presume to "find out" what participants were thinking, but to engage a conversation in which people – participants as well as initiating researchers (facilitators) – could *develop ideas/insights via the exchange.* Participant feedback indicated that participants did indeed feel that this was a beneficial outcome of the research and they also requested us to take the issues forward to other forums where their voices could be heard. We arranged for a further meeting with a district officer (who was one of Norma Nel's MA students) and she in turn agreed that a meeting should be set up comprising the initiating researchers (ourselves) with focus group participants and additional district officers as well as someone from head office, with a view to exploring challenges and possible ways of addressing them.

One of the anonymous reviewers of our article, in considering the question of the "placement" of our discussion, commented that our active approach "highlights the importance of more engaged educational research with a pragmatist twist and a transformative agenda". We would have liked to quote this account of what the term "active" meant for this reviewer. Her sentence well summarizes the gist of what active research can be said to mean in practice.

The pragmatist twist here refers to a specific epistemological orientation, which is not realist in the sense of defining knowledge as representation of some reality out there independently of people's experiences and interpretations (including those of the researcher). As we noted in

this article: "Our pragmatism can be classed as what Onwuegbuzie, Johnson and Collins (2009, p. 1268) refer to as a 'dialectical pragmatism'; this form of pragmatism embraces a philosophy of 'careful listening to multiple perspectives' rather than upholding a strong form of realism".

In most of my books and articles to date I explore the position of epistemological constructivism as an alternative to realism. Briefly put, I have suggested that what I call a *trusting constructivist* position (2001, 2002), develops constructivism in the direction of focusing on research accountabilities. In such a position, researchers can earn the trust of research participants and wider audiences by signalling that they are willing to engage in discussion around their research practices, including around the implications of any "results/interpretations" that are presented (in draft form for discussion). I suggest that when one operates in terms of a trusting constructivist: position, one is geared to encouraging an expansion of horizons (for seeing and acting) on the part of all concerned. What is also important in terms of a trusting constructivist argument is that ways of seeing (which carry attendant options for action) have to be justified discursively via processes of engaging in discourse and indicating that one is taking seriously a variety of inputs.

Considering Questions of Epistemology as Linked to Revisiting Power Relations

What is also important to note is that the pragmatic epistemological twist, where research is not judged in terms of its claims to be more or less objective (or value-free), but is judged on other criteria, is often seen as a site of political power. The power to define what it means to "know" often means that certain epistemological positions become rendered inferior in the academic as well as the social world. Chilisa states the imperative to offer alternatives to dominant definitions of "science" as being part of a "decolonizing ethics" (where ethics is not predicated on Western-oriented models of scientific knowing). As she strongly puts it:

> It can be argued that the exclusion of other epistemologies or knowledge systems is a methodological flaw and a violation of ethics. (2007, p. 199)

This article of hers is in a book called *Challenges and Responsibilities of Social Research in Africa: Ethical Issues* (2007). (My chapter in this book is called "Issues of accountabilty in survey, ethnographic and action research".) Like Chilisa I put forward an alternative to (dominant) realist epistemological stances by referring to a constructivist approach which, as I suggest here:

> Focuses on the value of discursive exchange between different … ways of co-constructing and working with information (as humanly mediated). (2007, p. 53)

In summary, the focus is not on trying to find ways to authorize any claim to "know", but rather is on encouraging discursive exchanges between people, including professional researchers and others, with a view to people extending their initial understanding of options for seeing and acting. (In my book on *Accountability in Social Research* I detail my suggestions for a trusting constructivist approach, where researchers can earn trust in terms of the relationships that are built up with research participants and wider audiences.)

A similar epistemological and ethical approach to social inquiry can also be said to be epitomized in the way that some of us in the ABET department involved in evaluating the impact of the Kha Ri Gude mass literacy campaign have approached the research process.

Thus far I am aware only of the team of researchers of which I am part. Our methodological process so far has included a content analysis of a sample of past learners' portfolios,

combined with focus group discussions which we facilitated (with the primary facilitator speaking in mother tongue to the participants, while doing some translations along the way so that the other facilitators could also become involved to some extent). In these discussions, past learners and teachers had the opportunity to express and discuss ways in which the campaign can be said to have touched their lives, as well as what may be further needed to enhance the value of the campaign. There are three points in this regard that I would like to highlight:

(1) Firstly, our accountability as researchers does not rest on any claim to be discovering something outside of the context of interaction in which the facilitators with participants are exploring the issues as experienced. We recognize that the context of interaction contributes to generating the "data" that emerges and we intend to take account of this, for example, when constructing (and discussing) reports.

(2) Secondly, we considered it important to take into account how the research endeavour might be seen by participants and how this (the presence of people coming and speaking to them about Kha Ri Gude) might feel for them. Hence we included a process of seeking feedback from them so that they are aware that we care about how they have experienced the focus group sessions and that we are interested in hearing about this.

(3) Thirdly, we have also sought to locate, with participants, certain action options to follow up (with others, including some government officials) – in line with participants' felt experiences of what is needed. This, it should be noted, is different from taking a stance of relinquishing responsibility for whether anyone may notice reports that become produced (as indeed with some researchers who argue that their responsibilities end once reports have been constructed).

Use of the Term "Inquiry"
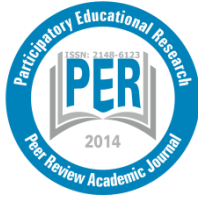
It remains now for me to comment on why I have used the word "inquiry" as part of the inaugural address title. This is because I am trying to focus on how people (professional researchers and others) can inquire together and learn together as well as discuss action options together through processes of co-exploration. I am not sure if the term "research" well captures this orientation. Nevertheless, one could also use the term "research" as I have in some of my writings – with the proviso that this need not go hand in hand with an epistemological realism, but rather is understood as re-search or re-looking at issues of concern through a focused inquiry process.

I hope that I have given some flavour of how I see that research (or focused inquiry) itself can and does make a difference to the unfolding of social outcomes – whether this is witting or unwitting. The term active research expresses a conscious intention to consider as part of one's responsibility the potential impact (as also discussed with others) of the doing of any social research.

References

Chilisa**,** B. (2007). Decolonizing ethics in social research. Issues of accountability in survey, ethnographic, and action research. In A. Rwomire & F. B. Nyamnjoh (Eds.), *Challenges and responsibilities of social research in Africa: Ethical issues* (pp. 199-208). Addis Ababa: The Organization for Social Science Research in Eastern and Southern Africa (OSSREA).

Coghlan, D., & Shani, A.B. (2005). Roles, politics and ethics in action research design. *Action Research* **18**(6): 533-545.

Harris-Lacewell, M. (2003). The heart of the politics of race: Centering Black people in the study of White racial attitudes. *Journal of Black Studies* **34**(2): 222-249.

Hofstede, G. (1984). *Culture's Consequences: International Differences in Work-Related Values.* London: Sage.

Holstein, J.A., & Gubrium, J.F. (1995). *The Active Interview*. London: Sage.

McKay, V.I., & Romm, N.R.A. (2008). Active research toward the addressal of HIV/AIDS in the informal economy in Zambia: Recognition of complicity in unfolding situations. *Action Research* **6**(2): 149-170.

Midgley, G. (2000). *Systemic Intervention: Philosophy, Methodology and Practice*. New York: Kluwer Academic/Plenum Publishers.

Milner IV, H.R. (2007). Race, culture and researcher positionality: Working through dangers seen, unseen, and unforeseen. *Educational Researcher* **36**(7): 388-400.

Omi, M.A. (2001). The changing meaning of race, in N. Smelser, W.J. Wilson, & F. Mitchell (eds.), *America Becoming* (pp. 243-262). Washington: National Academy Press.

Onwuegbuzie, A.J., Johnson, R.B., & Collins, K.M.T. (2009). Assessing legitimation in mixed research: A new framework. *Quality and Quantity*, **45**(6):1253-1271.

Romm, N.R.A., & Hsu, C-Y. (2002). Reconsidering the exploration of power distance: An active case study approach. *Omega* **30**(6): 403-414.

Romm, N.R.A., & Adman, P. (2004). Exploring the complexity of human dynamics within 360-degree feedback processes: The development of (active) qualitative inquiry. *Journal of Business and Society* **17**(1&2)**:** 170-189.

Romm, N.R.A., Nel, N.M., & Tlale, L.D.N. (2013). Active facilitation of focus groups: Co-exploring with participants the implementation of inclusive education. *South African Journal of Education* **33**(4) (article 811).

Romm, N.R.A. (2001). *Accountability in Social Research*: *Issues and Debates*. New York: Kluwer Academic/Plenum.

Romm, N.R.A. (2002). A Trusting Constructivist approach to systemic inquiry: Exploring accountability, *Systems Research and Behavioral Science*, 19(5): 455-467.

Romm, N. R. A. (2007). Issues of accountability in survey, ethnographic, and action research. In A. Rwomire & F. B. Nyamnjoh (Eds.), *Challenges and responsibilities of social research in Africa: Ethical issues* (pp. 51-76). Addis Ababa: The Organization for Social Science Research in Eastern and Southern Africa (OSSREA).

Romm, N.R.A. (2010). *New Racism: Revisiting Researcher Accountabilities.* New York: Springer.

Romm, N.R.A. (2013). Employing questionnaires in terms of a constructivist epistemological stance: Reconsidering researchers' involvement in the unfolding of social life. *International Journal of Qualitative Methods* **12**: 651-669.

Meeting the Needs of Older Students in Higher Education

Gail D. Caruth[*]

Ed.D. Department of Educational Leadership Texas A&M University-Commerce

The number of students 25 years of age and older enrolled in higher education has been escalating over the past 50 years. What is higher education is doing to prepare for this growth? With adults constituting almost half of today's student body, it is important to consider whether the academy is prepared to serve this society of adult learners. The purpose of this paper was to examine the literature on andragogy in higher education to determine if higher education is serving this segment of nontraditional students. Findings show that there has been a substantial increase of adult students enrolled in college and university classes, higher education is not doing the job needed to teach adult learners effectively, adults should be taught andragogically, andragogy is not being used in the higher education classrooms, and colleges and universities need to prepare to teach adult students andragogically. Insufficient empirical research has been conducted on andragogy despite its 40-year history of being considered the principal model of adult learning. However, with validated and reliable instruments available to measure the constructs of andragogy, clearer validation of andragogy in higher education is promising. Predictive research can be completed to study the effect of andragogical practices on learning and student satisfaction outcomes. There is the need for further research on andragogy in an attitude of mutuality and reciprocity to develop further the field of adult education. This attitude of mutuality and reciprocity is innovative.

[*] Address for correspondence: P. O. Box 3022 Commerce, Texas 75429 USA, E-mail: gcaruth@leomail.tamuc.edu

Introduction

The number of adults, those 25 years of age and older, enrolled in the academy is escalating (Kasworm, 2012; Marschall & Davis, 2012). The numbers of adult students attending colleges and universities have increased from 29% in 1970 to 43% in 2009 (National Center for Education Statistics [NCES], n.d.a). While almost half of today's overall college student body are adult learners (Altbach, Berdahl, & Gumport, 2005), many facets of higher education are not designed with adult learners in mind (Tannehill, 2009). American institutions of higher education were originally established with the purpose of educating the privileged youth (Rudolph, 1990; Thelin, 2004). However, colleges and universities over time have begun to educate more adult students (Kasworm, 2012). This need for continuous adult education has created a profitable enterprise (Merriam, Caffarella, & Baumgartner, 2007) and merits a closer look.

Many could ask what higher education is doing to prepare for this growth. With adults constituting almost half of today's student body, it is important to consider whether the academy is prepared to serve this society of adult learners. The purpose of this paper was to examine the literature on andragogy in higher education to determine if higher education is serving this segment of nontraditional students. Are colleges and universities adequately meeting the needs of the adult learners in and outside of the classroom?

A review of the literature presents a compilation of research, peer-reviewed journals, non-peer reviewed journals, and books on andragogy. The academic databases used were from the online library of Texas A&M University-Commerce and included, but were not limited to, Academic Search Premier, EBSCO, Education Research Complete, Eric, ProQuest, and Sage Publications. The key descriptive terms used for this research were andragogy, adult learners, adult students, and nontraditional learners.

Significance of the Study

In 1967, Malcolm Knowles, then professor of education at Boston University and a general consultant in adult education, received the Delbert Clark Award from West Georgia College for his contribution to adult education. This award was considered by many to be the highest national honor in the field of adult education. Furthermore, Knowles was credited for giving "new and special meanings to the term adult education" (p. 350).

The purpose of education is to enable people to develop skills to engage in continuous learning maintained Knowles (1976). Knowles (1968) claimed in his address at the awards banquet that the very survival of civilization requires continuous learning after the formative years. Despite this lack focus on the growth in numbers of adult learners in higher education, Brookfield (2006) suggested the notion that both students and teachers are in positions of encouraging continuous learning.

Knowles (1968) maintained that adult education had undergone immense growth in enrollment. Numerous institutions have recognized adult learning as a major aspect of higher education. Knowles (1968) also acknowledged that adult education is a profitable enterprise. This is demonstrated in the proliferation of for-profit institutions. Knowles claimed that a great deal of money, from a number of sources (government, education, business, and industry), was being invested in adult learning. He stated that not only were more adult learners active in learning than ever before but that adult learning was exploding.

Knowles stressed that higher education was not fulfilling its educational role of adult education and regrettably others have since verified this position (Harper & Ross, 2011; Pew, 2007). Knowles also suggested that adult education in higher education had been unsuccessful. He stated that "the biggest obstacle to the achievement of the full potential of adult education has been that it has been tied to and it has been hamstrung by the concepts and the methods of the traditional education of children" (pp. 350-351). According to Pew (2007), administration rarely considers student fulfillment when establishing the curriculum and that the likelihood of getting higher education to take responsibility for the teaching of adult students would be difficult.

Brookfield questioned the lack coverage of adult education in the higher education literature in *The Skillful Teacher* (2006). This lack of coverage puzzled him because of the growth in the number of adult learners in higher education. He further claimed that textbooks on adult education and learning are seldom recognized in colleges and universities.

Knowles claimed that education was, however, transforming and discovering that adults learned differently than children learn, even though they were still being taught as children were taught. Knowles claimed that the adult curriculum was distinct from the curriculum for youth (Knowles, 1968). His address at the awards banquet was published as an article "Androgogy, Not Pedagogy," which appeared in *Adult Leadership* in April of 1968. It should be noted that the spelling of *androgogy*, as it appeared in the article, was later corrected to *andragogy* because of communications between Knowles and the publisher of Merriam-Webster dictionaries (Knowles, Holton, & Swanson, 2011). This article and his address at the awards banquet at West Georgia College are often referred to as the introduction of the term *andragogy* to the United States, giving Knowles a lasting link to andragogy (Merriam et al., 2007).

Knowles introduced the term *andragogy* as the science of teaching adult learners with a focus on the characteristics of adult learners. The term derives from the Greek word *andros*, which means "man" or "grownups" (Knowles, 1968, p. 351) or *agogus* meaning "leader of" (Knowles et al., 2011, pp. 59-60), which translates to "the art and science of helping adults learn" (Knowles, 1984, p. 6). Interestingly, Knowles made an important distinction between a pedagog and an andragog. A pedagog, according to Knowles, would want to keep the learner dependent on the teacher, whereas an andragog would encourage the learner to become autonomous in the desire for further inquiry (as cited in Levitt, 1979, p. 53).

Knowles asserted that administration was ultimately responsible for the implementation of andragogy in higher education. He claimed that university administrators violated the principles of andragogy in favor of the movement toward efficiency. In other words, focus was on the highest production for the lowest cost. Sadly this was the focus for administration in spite of the effect it had on students learning. In his opinion, university administration lagged behind management in business and industry who were seeking a balance between the need for human growth and organizational efficiency. Knowles (1976) attributed this gap between higher education and business and industry to higher education's overemphasis on organizational efficiency that unfortunately leads to interference with quality education for students and the society it serves. If higher education is in the business of teaching adult learners, as Pew (2007) maintains, "then the model must be that of Andragogy" (p. 18).

Knowles (1976) claimed that andragogy required a transformation in the student-teacher relationship. The role of the teacher should be analogous to that of a facilitator, something to

which few teachers have been exposed (Brookfield, 2006; Knowles, 1976). This change in the role of the teacher required administration to develop new resourceful staffing and training practices to assure that the type of teacher needed was hired (Knowles, 1976).

The literature revealed that the number of nontraditional students is going to continue to increase (Altbach et al., 2005; Kasworm, 2012; Merriam et al., 2007; National Center for Education Statistics [NCES], n.b.b; USBC, 2010). The competition for adult learners, therefore, is also going to continue to increase for colleges and universities (Tannehill, 2009). As a result, institutions that "continue to focus on the traditional students," as opposed to giving equitable consideration to nontraditional students, "may find themselves trying to figure out how to keep their doors open as the number of traditional students continues to decline" (p. 129) asserted Tannehill.

Research on Andragogy

Insufficient empirical research has been conducted on andragogy despite its 40-year history of being considered the principal model of adult learning (Laird, Naquin, & Holton 2003; Merriam et al., 2007; Noe, 2010). The majority of the research completed is actually in the practice of andragogy. Knowles' book *Andragogy in Action: Applying Modern Principles of Adult Learning* (1984), for example, provided examples of application of the andragogical model in business and industry. In his book Knowles assembled studies based on the assumptions of andragogy he had received from professionals in business and industry. These studies were completed in the workplace. Knowles included 36 of over 100 studies and categorized them according to institutional type. According to Knowles, the most beneficial theme of his book was "the power of the notion that people learn best when treated as human beings" (p. xvi).

Henschke (2011a) claimed that there are 330 published documents on andragogy by various authors. He recognized six distinct themes in this research. Those distinct themes include the evolution of the term andragogy; historical antecedents shaping the concept of andragogy; comparisons of the American and European understandings of andragogy; promoting and maintaining the American and worldwide views of andragogy; practical applications of andragogy; and theory, research, and definition of andragogy.

Research on adult education has been descriptive for the most part. Furthermore, this research has been in the practice of adult learning in business and industry rather than on teaching adults. A number of publications have focused on learning experiences aimed at sharing this information with others in the field. This research, sadly, has not added to the scholarly body of knowledge. There has also been a shift in research from broad overviews and application of findings to an understanding of observable facts. The tendency has been to translate practice into research rather than translating research into practice. Research on adult education, regrettably, has been fragmented and inconsistent. What research there is has not been translated into practice in higher education. Alas, educators are not commonly trained in adult education (Brookfield, 2006; Rose, 2000).

A Need for Andragogy

A different method of instruction is required for educating adult learners. The need for a distinctive method is due to the more complex lives of today's adults. The usual pedagogical methods are not adequate to meet the needs of these nontraditional students and their complicated lives. For example, the education of the youth is a teacher-centered

approach calling for a transfer of information and requiring the student to memorize. On the other hand, andragogical methods are required replacing teacher-centeredness, the transfer of information, and student memorization with problem-solving skills (Loeng, 2013).

In the Interdisciplinary Studies Program at the University of Southern Mississippi, students took the initiative to learn by designing their own degree plans within broad boundaries established by the university. Students expressed enjoyment of education as a result of having control over their learning. They also expressed the enjoyment of having the benefit of a renewal of the "love of learning" (Harper & Ross, 2011, p. 166). Furthermore, the faculty benefited from the experience as well. They were able to examine their own scholarship, values, and practice. The faculty believed, according to the researchers, that efforts to encourage adult learners to become autonomous learners were both beneficial and rewarding.

Law students from the Third and Fourth Districts of Idaho claimed that the andragogical principles espoused by Knowles were the most helpful in their preparation for practicing law. Students claimed they learned the most in classes that employed the assumptions of andragogy. Students became more self-directed in these classes. They were more receptive to the traditional customs of practicing law when educators applied course content to experiences and stated that the classes "came alive" (Taylor, 2010, p. 185). Overall, students were more willing to go through the learning process when they were informed about what they would learn and the reasons for learning. When experienced attorneys discussed practical experiences on the job, moreover, students tended to learn more. The Chinese proverb holds true, "a single conversation with a wise man is better than ten years of study" (p. 53) asserted Taylor and Kroth (2009).

Management education also fits well with the assumptions of andragogy. In fact, management education in higher education could be called andragogy. This is because the instructional strategies utilized in management courses are often effective for adult students maintained Forrest and Peterson (2006). As a result, numerous management educators unknowingly teach from an andragogical perspective. The American Management Association's master's degree program in management was structured around andragogy and competency-based education (Knowles, 1984).

Andragogy allows management educators to employ traditional teaching methods in unique ways. If the educator asks students what they need to know and incorporate the responses into the lectures, for example, lectures can be effective methods of instruction. Further, students will be more interested in the lectures on creating a mission statement when they understand the importance of mission statements to organizations. When lectures are based on students' desires to learn the information, the lecture method is effective. Unfortunately, the pedagogical method of teaching remains prevalent in the typical university classroom (Forrest & Peterson, 2006).

Tannehill (2009) surveyed college and university administrators on the use of andragogy in the classroom. According to the researcher, staff members could benefit from formal education on andragogy and college and university administrators should be well educated on andragogy. Higher education is encouraged to consider including courses on andragogy as part of the master's and doctoral curricula for future administrators. Students, 25 years old and older are the fastest growing segment of the student body in higher education. Unfortunately, most administrators know little about educating these students. Colleges and universities that provide the "whole package" (p. 128) to adult learners will be the ultimate

survivors claimed Tannehill.

Educators are encouraged to invest time and effort in strengthening their knowledge of andragogy (Chan, 2010; Kiener, 2010; Minter, 2011; Yow, 2010). Educators are also encouraged to consider adult learning principles when designing curricula that focus on the needs of adult learners (Knight, 1999; Yow, 2010). Educators, administrators, and policy makers are advised to consider implementing effective efforts to ensure that the needs of adult learners are met. Yow (2010) recommended that a good starting point is for educators to consider Knowles' six assumptions in daily teaching practices. The most effective learning will ultimately transpire when adult learners can link skills with application suggested Yow.

Taylor and Kroth (2009) designed a teaching methodology instrument and tested it in a law school classroom using the Socratic method of instruction. They believed that the Socratic method of instruction encourages law students to "think like a lawyer" (p. 44). If this instrument could predict whether pedagogical or andragogical methods were used, claimed the researchers, it would encourage educators to consider their own teaching styles. This would advance the integration of the six andragogical assumptions espoused by Knowles in higher education. This integration into higher education teaching methodologies could ultimately result in better educational experiences for adults claimed Taylor and Kroth.

Martell (2011) found similar results when students were taught bible lessons following some of the principles of andragogy. Martell compared the effectiveness of a lecture-based, pedagogical teaching philosophy to a discussion-based, andragogical teaching philosophy in adult bible fellowships (ABFs) at The Chapel in Akron, Ohio. Findings suggested that students learned more with andragogical principles, enjoyed the andragogical teaching methods, believed the lessons were more memorable, and practiced the new knowledge in their everyday lives. The students were more confident about their learning maintained Martell.

The andragogical model has also had an impact on the teaching philosophy of educators internationally asserted Chan (2010). Because of this international impact, educators and educational institutions globally are encouraged to make opportunities available to all learners to be involved in learner-centered educational experiences. Educators are also encouraged to consider adopting and applying andragogical methods that create a more engaging learning environment to prepare students to compete in the 21st century workplace. Adult learners need a more active role in the planning and learning processes, they need to understand the learning, and they need to apply the learning in their everyday lives.

Kiener (2010) recommended that faculty frequently examine their roles as educators. This examination includes assessing their role of teaching, their own teaching philosophies, how students learn, and their use of the assumptions of andragogy in the classroom. Regardless of how many classes they teach per semester, members of the faculty have these ethical responsibilities to the students they teach avowed Kiener.

Learning How to Learn

According to Hadley (1975), the purpose of learning is to allow adult learners to execute personal growth according to what that growth specifically means to them. Hence, learners are learning how to learn. This practice, in turn, enables learners to form their own understanding of their realities. Learners grow to know themselves, to know their talents, and to know their desires. This self-knowledge is of great importance to adult learners asserted

Knowles (1984). Sadly, educators have historically viewed themselves as more andragogical than their students have viewed them averred Hadley.

Andragogy requires learners to participate in all aspects of learning, from directing the learning process to incorporating past experiences. Andragogy advances a mutual relationship between the learner and educator in managing the learning process. According to Hadley (1975), andragogy furthers a two-way, equally dependent interaction of mutuality and reciprocity aimed at joint development. In order for learning to be effective, the focus of learning must be on the adult learner gaining self-confidence. This self-confidence will subsequently motivate the learner to continue learning and build on past knowledge and experiences.

Institutions establish the overall criteria for learning. The educator is in charge of the design of the learning process and uses his or her influence to assure the learner accomplishes the objectives through mutuality and reciprocity. However, the learner's personal objective is most important. The ongoing challenge for the educator is to encourage adult learners to continue to select more complex objectives to test and enhance learning. Hence, the relationship between educator and learner is one of expressing and sharing (Hadley, 1975).

Teaching Andragogically

Beder and Darkenwald (1982) were interested in ascertaining whether instructors taught adult learners differently than they taught pre-adult learners. Data were collected from 173 public school and college teachers with a median age 41.8 years. These instructors taught both adults and pre-adults. Teachers indicated that they taught andragogically to the adult learners by accentuating responsive, learner-centered instruction that de-accentuates power and rules. This andragogical practice in the classroom was confirmed in the findings of the study results. The adult learners were seen as more motivated, pragmatic, self-directed, and task-oriented than were pre-adult learners indicated the researchers.

Gorham (1985) analyzed reported and observed teaching practices of 115 university, community college, and public school instructors who taught adult and pre-adult learners. Even though the instructors reported teaching adult learners and pre-adult learners differently, results yielded little evidence of student-centered approaches. Comparative analysis was used to study aspects that emerged and affected interactions in adult education classrooms. According to the researcher, the interaction investigation was supported by offering impartial accounts of teaching behaviors, which might be developed for future training of adults.

According to Clerk (2012), educators are encouraged to understand that adult learners enroll in education with different needs than pre-adult learners. Furthermore, adult learners have pre-formed biases and ideas about education. These pre-formed biases and ideas developed through life experiences could unfortunately represent barriers to education (Clerk; Kasworm, 2012; Pew, 2007). It is important, therefore, that educators communicate to adult learners the impact, method, and implementation of learning. It is also important that educators understand that adult learners have different learning styles and preferences and learners are ready to move on to the next learning experience once learning is internalized claimed Clerk.

Hughes and Berry (2011) noted that instructors are encouraged to understand that adult learners have been recognized as being intellectual and technological. Therefore, adult learners should be provided opportunities to be involved in making decisions for their own

learning methods. They should also be provided with opportunities for information collection rather than being hand-fed information. If this collaboration is initiated early in the process, adult students appreciate having control of their own learning and will demonstrate the value of education. Educators are also encouraged to consider collaborating with students when developing courses maintained the researchers.

Adult learners tend to behave dependently when they are in a more structured educational setting claimed Knowles (1984). This dependence may be because learners do not know how to learn, they only know how to be taught. However, the main purpose of education is to acquire the ability to inquire and to go on acquiring new knowledge throughout life. Therefore, society must not think of learning as only something that takes place in an institution. Education is something that is a part of life. Education is a prerequisite in this evolving world (Knowles, 1976).

Clemente (2010) discovered that Knowles' model of andragogy is compatible with experiences of adult students in multi-generational community college classrooms in a number of ways. Clemente found that the self-concept of adult learners moves over time from that of dependency to self-directing. Furthermore, over time adult learners overcame anxiety. They became more at ease with being students and interacting with their colleagues. Adult students also took responsibility for managing their coursework. Into the bargain, previous experiences of adult learners provide rich resources for discussions and learning in the classroom suggested Clemente.

In a study conducted on web-based distance education (WBDE) for adult learners, Zhang (2009) claimed that most distance education students are adult learners. The researcher also claimed that learning is more meaningful if both the educator and the learner shared the responsibility for the design of learning goals and objectives, interacted with other members of the class, promoted reflection on experiences, related new examples that made sense to the learner, maintained self-directed learning, and evaluated learning. This shared responsibility is both an opportunity and challenge for WBDE according to Zhang.

In consideration of computer learning, Knight (1999) found that learning and confidence increase when adult learners are provided opportunities for hands-on computer learning. Allowing students to maintain control of the mouse and the computer keyboard also increased learning outcomes. Therefore, it is important that computer programs and manuals be easy to work with and easy to understand. This ease provides opportunities for self-paced independent learning. Learning is often impacted by the education level and occupation of adult learners maintained Knight. Instructors are encouraged, as a result, to consider the needs of the student when assessing the classes and designing the curriculum.

Research has suggested that Knowles' assumptions of andragogy are compatible with blended learning tenets (Korr, Derwin, Greene, and Sokoloff, 2012). Blended courses are defined as "those that deliver course material in face-to-face and online formats and that allow students to collaborate with instructors and peers in these different settings" (Caruth & Caruth, 2012, para. 5). Korr et al. (2012) claimed that blended learning and andragogy correspond according to the following: learners compare information to past experiences to establish new information, learners consider busy work as offensive, learners separate new learning from their everyday lives, learners anticipate individualized feedback from educators as opposed to just receiving a grade, and learners are inspired by relevant problem-solving activities. Students have more time to compare new information and past experiences than they do in

traditional face-to-face classroom settings due to the flexibility of time constraints of blended courses. Interactive online assignments tend to reduce the feelings of being assigned busy work activities. Additionally, collaboration with peers from locations outside the classroom minimizes the sense students often feel of separation in blended classes. It is important that continuous feedback is provided students through electronic means asserted Korr et al. (2012).

Instructors affect learning outcomes (Knight, 1999). Therefore, providing a supportive environment is critical for learning success of adult learners. An environment that lacks support or offers negative responses impedes learning. On the other hand, positive responses encourage learning. Granting opportunities to ask questions and make mistakes free from criticism and time-constraints encourages self-directed learning. Offering adult students the time to work through problems also results in learning. Hence, instructors can enhance learning by being available for questions and providing answers free of disapproval avowed Knight.

Educators of adult learners are encouraged to support organizational learning in their respective institutions. They are also encouraged to initiate communication with colleagues on teaching and learning models by discussing pedagogical and andragogical tenets and sharing teaching experiences. Unfortunately, instructors frequently use a mixture of learning theory and practice and they may not even be conscious of what theory or model of learning they implement in the classroom. Rather, their instructional efforts are based on their individual internal concept of what is appropriate without knowing whether learning theory or research supports their instructional methods practiced in the classroom suggested Minter (2011).

Adult educators are encouraged to work with adult learners to offer choices and opportunities. Educators are advised to remember that the majority of students encounter at least one educational barrier in their lifetimes. As a result, educators are also advised to consider all potential complexities of adult learners (Finn, 2011; Ritt, 2008). Educators are forewarned to bear in mind that many adult learners are more likely to leave educational institutions without earning a college degree due to these additional barriers (Kasworm, 2012; Tannehill, 2009).

Individuals tend to form impressions of new experiences that may last a lifetime. These impressions can include any form of adult learning or education indicated Finn (2011). The main barrier for adult learners returning to school is often the coordination of responsibilities (work, family, school, care receivers, volunteer organizations, community, etc.). However, adults who return to school are internally motivated to succeed maintained the researcher. They understand the need to comply with employer requirements or improve their job skills. They often want opportunities to make positive impacts (Anderson, 2007). Therefore, considering the importance of providing an inviting environment will help offset the challenges of educational barriers. Inviting learning environments encourage adults to continue learning opportunities. Inviting environments help to overcome barriers to further education (Finn, 2011; Kasworm, 2012).

Nontraditional, adult learners frequently have needs that traditional students do not have; consequently, they require different student services. University orientation programs commonly are not designed with older adult students in mind maintained Tatum (2010). These nontraditional students generally have more complex lives than do the traditional students. For example, older students are often responsible to and for families, employers, care receivers, school, community, volunteer organizations, etc. (Kasworm, 2012; Tatum).

Adult learners also have experience with families, employment, and the military which can be valuable to younger students when shared. What is more, these adult students can be a rich resource for traditional younger students. Administrators should take advantage of the knowledge and experiences of nontraditional students in the classrooms. Mentoring relationships should be established to benefit traditional and nontraditional older students mutually. Adult students can and should be encouraged to act as mentors or role models for traditional younger students claimed Tatum.

University administrators are advised to design programs and services with nontraditional older students in mind recommended Tatum (2010). Orientation programs, for example, should be designed at convenient times and locations for older students. Adult learners should also be assigned advisors who are familiar with the needs of older students. Consideration of the time constraints of the older students is ultimately important. This growing diverse student body has had an impact on the services and programs once provided exclusively to traditional students. Therefore, these services and programs should consider the needs of diverse students.

Cretchley and Castle (2001) suggested that andragogy has had an influence on the values and teaching philosophies of adult educators in a number of countries. For example, South Africa applied the andragogical method to adult higher education thereby offering a measure of empowerment for adult learners. According to the researchers, the andragogical method offered an antidote to the domination of education in an undemocratic society. In other words, adult learners need to direct the learning process because society does not have the right to either socialize or re-socialize society according to Cretchley and Castle.

In a study that compared higher education in Germany, the United Kingdom, and Japan (Yoshimoto, Inenaga, and Yamada, 2007), andragogy was considered learner-focused and was aligned with the concept of teaching when compared to pedagogy, which is teacher-focused and in-line with the idea of learning support. Often the andragogical method of teaching is compared to "off-campus open learning" (p. 80). Historically, a traditional university education was viewed as being for young and elite students. However, universal access meant the inclusion of nontraditional students in the study body.

Andragogy should be empirically researched in higher education as it relates to evaluations of educational outcomes averred Yoshimoto et al. (2007). This evaluation is gathering interest in Japan where universities need to offer opportunities for older students. In Germany, pedagogies should be developed because of university reforms maintained the researchers. In the United Kingdom, adult learners are enrolling in classes on a part-time basis in new (non-traditional) universities, as opposed to young full-time students who enroll in traditional universities. The application of higher education in working life may be different in these two universities. Germany, the United Kingdom, and Japan implemented a two-tiered approach that considered that andragogical methods could also be more suitable for younger students on occasion than just for adult learners, suggested Yoshimoto et al.

A Need for Further Research

Andragogy is not without its critics. Hartree (1984) critiqued Knowles' assumptions of andragogy based on a lack of clarity and a general ambiguity. Hartree stated that the relationship between adult and child learners is unclear. Knowles assumptions are vague maintained the researcher. She also claimed that andragogy is based on man's "existence" (p.

208), which explains the confusion over whether andragogy is about adult learning or about teaching adults.

Knowles (1976) recognized the need for further research on andragogy. He suggested that an attitude of "mutual inquiry" (p. 15) was needed to develop further the field of adult education and this attitude of mutual inquiry is "pioneering" (p. 16). This pursuit of research on andragogy requires a joint effort of patience and collaboration. Individuals who require "pat answers, neat categories, and proved theories will be uncomfortable in the climate" (p. 16) of andragogy and adult education in its current state maintained Knowles. Clearly, andragogy requires honest empirical research before some of the issues presented in Hartree's critique can be resolved.

Assessment of adult learners has posed an additional challenge for educators who attempt to practice andragogy by becoming more of a "guide on the side" rather than a "sage on the stage" in the classroom. This role of facilitator is hindered when it comes to grading and evaluating adult students. Final evaluations are often determined by the educator's criteria claimed Beaman (1998). These grading criteria include multiple choice exams, short answer exams, and projects graded by the instructor. Grading undermines previous efforts for student empowerment (Beaman, 1998).

Adult learners expect and need assessments for feedback, motivation, and evaluation purposes. Evaluations and grading are complex and an important part of the communication process between educators and learners. Effective assessments can lead to learning experiences that are more meaningful maintained Beaman (1998). Alternative options to traditional evaluation approaches include peer evaluations, self-assessments, praiseworthy grading (pointing out successes rather than failures), and checklists for quality (measurements of the quality of an idea). Praiseworthy grading and checklists for quality provide instructor input in a more facilitative manner than with traditional grading approaches. It is important to consider who does the grading and how the grading is accomplished. According to the literature, adult learners need to be involved in these assessments; therefore, traditional grading methods need to change (Beaman). Regardless, educators should consider self-diagnosis with input from the educator and peers in the evaluation process asserted Hadley (1975).

Knowles et al. (2011) suggested that the main reason strong empirical research on andragogy does not exist is that there has not been a psychometrically valid instrument available to measure the constructs of andragogy (Holton, Wilson, and Bates, 2009). While a number of attempts to develop such an instrument do exist, most attempts have not succeeded for an assortment of reasons. Knowles developed one such instrument, for example, that had not been validated.

The development of the Andragogical Practices Inventory (API) by Suanmali (1981) that successfully measured andragogical assumptions is very significant. The API design and accessibility for empirical research in the future is an important development for the discipline of andragogy and adult education. Holton et al. (2009) proposed that further research involving instruments to test the principles of andragogy is needed to ascertain whether combining the modification and orientation to learning assumptions is justified and presents opportunities for future research. Henschke developed and validated the Instructor Perspective Inventory (IPI). Of note, the IPI has been validated in four other studies. The IPI was modified from a 4-point to a 5-point Likert Scale, which resulted in the Modified

Instructor Perspective Inventory (MIPI). The MIPI has been used as a research instrument in a number of doctoral dissertations and continues to be used (J. Henschke, personal communication, May 31, 2012).

In summary, the purposes and methods of adult learning will continue to be debated and, as this occurs, advances are likely to take place in the future research and practice in andragogy (Knowles et al., 2011). A review of the literature revealed the following major points:

- There has been a substantial increase of adult students enrolled in college and university classes (Altbach et al., 2005; Caruth, 2013; Finn, 2011; Harper & Ross, 2011; Knowles, 1984; Marschall & Davis, 2012; Merriam et al., 2007; NCES, n.d.a).
- Andragogy is not being used in the higher education classrooms (Beder & Darkenwald, 1982; Brookfield, 2006; Caruth, 2013; Gorham, 1985; Hadley, 1975; Harper & Ross, 2011; J. Henschke, February 2, 2012; Knowles, 1968; Knowles, 1976; Pew, 2007; Rose, 2000).
- Adults should be taught andragogically (Beaman, 1998; Caruth, 2013; Chan, 2010; Clemente, 2010; Clerk, 2012; Forrest & Peterson, 2006; Hadley, 1975; Hughes & Berry, 2011; Kiener, 2010; Knight, 1999; Knowles et al., 2011; Loeng, 2013; Martell, 2011; Tatum, 2010; Taylor, 2010; Yow, 2010; Zhang, 2009).
- Colleges and universities need to prepare to teach adult students andragogically (Anderson, 2007; Beaman, 1998; Caruth, 2013; Chan, 2010; Clerk, 2012; Finn, 2011; Hadley, 1975; Hughes & Berry, 2011; Minter, 2011: Kiener, 2010; Knight, 1999; Ritt, 2008; Tannehill, 2009; Tatum, 2010; Taylor & Kroth, 2009; Yow, 2010).
- Higher education is not doing the job needed to teach adult learners effectively (Brookfield, 2006; Caruth, 2013; Harper & Ross, 2011; Knowles, 1968; Rose, 2000).

Implications

The availability of instruments to measure the constructs of andragogy in empirical research will strengthen the foundation of andragogy. Predictive research can be completed to study the effect of andragogical practices on learning and student satisfaction outcomes. In the past, andragogy has experienced a lack of empirical tests. However, with validated and reliable instruments available to measure the constructs of andragogy, clearer validation of andragogy in higher education is promising (Holton et al., 2009).

Recommendations

It is recommended that further research on andragogy be completed to measure the constructs of andragogy. Further research is needed involving instruments to test the principles of andragogy to ascertain whether combining the modification and orientation to learning assumptions is justified and presents opportunities for future research.

References

Altbach, P., Berdahl, R., & Gumport, P. (2005). *American higher education in the twenty-first century* (2nd ed.). Baltimore, MD: Johns Hopkins University.

Anderson, J. M. (2007). *A conceptual framework of a study in preferred learning styles: Pedagogy or [andragogy]* (Unpublished doctoral dissertation). Spalding University, Louisville, Kentucky.

Beaman, R. (1998). The unquiet...even loud, andragogy! Alternative assessments for adult learners. *Innovative Higher Education, 23*, 47-59. doi:10.1023/A:1022920513341

Beder, H. W., & Darkenwald, G. G. (1982). Differences between teaching adults and pre-adults: Some propositions and findings. *Adult Education, 32*(3), 142-155. doi:10.1177/074171368203200303

Brookfield, S. D. (2006). *The skillful teacher: On technique, trust, and responsiveness in the classroom* (2nd ed.). San Francisco, CA: Jossey-Bass.

Caruth, G. (2013). *Andragogy in higher education: Identifying 2010 adult learners in baccalaureate degree-granting institutions*. (Unpublished doctoral dissertation). Texas A & M University-Commerce, Commerce, TX.

Caruth, G. D. & Caruth, D. L. (2012). Significant trends in online education. *Journal of Online Education*. http://www.nyu.edu/classes/keefer/waoe/waoej.html.

Chan, S. (2010). Applications of andragogy in multi-disciplined teaching and learning. *Journal of Adult Education, 39*(2), 25-35.

Clemente, K. A. (2010). *Experiences of adult students in multi-generational community college classrooms* (Unpublished doctoral dissertation). Pennsylvania State University, University Park, PA.

Clerk, K. (2010). *Student perception and success: How adult learners at a two-year technical institution perceive instruction and how their perceptions contribute to their overall academic success* (Unpublished doctoral dissertation). Oakland University, Rochester, MI.

Cretchley, G., & Castle, J. (2001). OBE, RPL, and adult education: Good bedfellows in higher education in South Africa? *International Journal of Lifelong Education, 20*(6), 487-501.

Finn, D. (2011). Principles of adult learning: An ESL context. *Journal of Adult Education, 40*, 34-39.

Forrest, S. P., & Peterson, T. O. (2006). It's called andragogy. *Academy of Management Learning & Education, 5*, 113-122.

Gorham, J. (1985). Differences between teaching adults and pre-adults: A closer look. *Adult Education Quarterly, 35*(4), 194-209. doi:10.1177/0001848185035004002

Hadley, H. N. (1975). *Development of an instrument to determine adult educator's orientation as andragogical and pedagogical* (Unpublished doctoral dissertation). Boston University School of Education, Boston, MA.

Harper, L., & Ross, J. (2011). An application of Knowles' theories of adult education to an undergraduate interdisciplinary studies degree program. *The Journal of Continuing Higher Education, 59*, 161-166. doi:10.1080/07377363.2011.614887

Hartree, A. (1984). Malcolm Knowles' theory of andragogy: A critique. Inter*national Journal of Lifelong Education, 3*(3), 203-210. doi:10.1080/0260137840030304

Henschke, J. A. (2011a). Considerations regarding the future of andragogy. *Adult Learning, Futures Column, 22*, 34-37. doi:10.1177/104515951102200109

Holton, E. F., Wilson, L. S., & Bates, R. A. (2009). Toward development of a generalized instrument to measure andragogy. *Human Resource Development Quarterly, 20*(2), 169-193. doi:10.1002/hrdq.20014

Hughes, B. J., & Berry, D. C. (2011). Self-directed learning and the millennial athletic training student. *Athletic Training Education Journal, 6*, 46-50.

Kasworm, C. E. (2012). US adult higher education: One context of lifelong learning. *International Journal of Continuing Education and Lifelong Learning, 5*(1), 1-19.

Kiener, M. (2010). Examining college teaching: A coaching perspective. *Rehabilitation Education, 24*(1/2), 69-74.

Knight, K. J. (1999). *Older adults and technology: A critical incident inquiry into learning experiences* (Unpublished doctoral dissertation). Texas A&M University-Commerce, Commerce, TX.

Knowles, M. S. (1968). Andragogy, not pedagogy. *Adult Leadership, 16*(10), 350-352, 386.

Knowles, M. S. (1976). *The modern practice of adult education: Andragogy versus pedagogy*. New York, NY: Association Press.

Knowles, M. S. (1984). *Andragogy in action: Applying modern principles of adult learning*. San Francisco, CA: Jossey-Bass.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2011). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). Burlington, MA: Butterworth-Heinemann.

Korr, J., Derwin, E. B., Greene, K., & Sokoloff, W. (2012). Transitioning an adult-serving university to a blended learning model. *Journal of Continuing Higher Education, 60*, 2-11. doi:10.1080/07377363.2012.649123

Laird, D., Naquin, S. S., & Holton, E. F. (2003). *Approaches to training and development* (3rd. ed.). New York, NY: Basic Books.

Loeng, S. (2013). Eugen Rosenstock-Huessy – an andragogical pioneer. *Studies in Continuing Education, 35*(2), 241-253. doi: 10.1080/0158037X.2012.749850

Levitt, L. (1979). Critique: Andragogy revisited II. *Adult Education Quarterly*, *30*, 52-57. doi:10.1177/074171367903000104

Marschall, S., & Davis, C. (2012) A conceptual framework for teaching critical reading to adult college students. *Adult Learning, 23*(2), 63-68. doi:10.1177/1045159512444265

Martell, J. (2011). *Evaluating the effectiveness of andragogical teaching in adult bible fellowships at The Chapel, Akron, Ohio* (Unpublished doctoral dissertation). The Southern Baptist Theological Seminary, Louisville, KY.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco, CA: Jossey-Bass.

Minter, R. L. (2011). The learning theory jungle. *Journal of College Teaching & Learning, 8*(6), *7-15.*

National Center for Education Statistics, (n.d.a). Digest of education statistics, 2010, *Chapter 3: Postsecondary education enrollment, table 199*. Washington, DC: Author.

National Center for Education Statistics, (n.d.b). Digest of education statistics, 2010, *Projections of education statistics: Section 5. Enrollment in postsecondary degree-granting institutions: Enrollment by selected characteristics and control of institution, table 21*. Washington, DC: Author.

Noe, R. A. (2010). *Employee training & development* (5th ed.). New York, NY: McGraw-Hill.

Pew, S. (2007). Andragogy and pedagogy as foundational theory for student motivation in higher education. *Insight: A collection of faculty scholarship, 2*, 14-25.

Ritt, E. (2008). Redefining tradition: Adult learners and higher education. *Adult Learning, 19*(1/2), 12-16. doi:10.1177/104515950801900103

Rose, A. D. (2000). What is the state of adult education research today? *Adult Learning, 11*(4), 28-29. doi:10.1177/104515959901100410

Rudolph, F. (1990). *The American college and university: A history* (2nd ed.)*.* Athens, GA: University of Georgia Press.

Suanmali, C. (1981). *The core concepts of andragogy*. (Unpublished doctoral dissertation) Ann Arbor: Dissertation Abstracts International. (UMI No. 8207343).

Tannehill, D. B. (2009). *Andragogy: How do post-secondary institutions educate and service adult learners?* (Unpublished doctoral dissertation). University of Pittsburgh, Pittsburgh, PA.

Tatum, C.G. (2010). *An explanatory mixed methods inquiry into the academic experience of nontraditional community college students* (Unpublished doctoral dissertation). Texas A&M University-Commerce, Commerce, TX.

Taylor, B. F. (2010). *Raising the bar: A qualitative study of adult learning theory and its effectiveness of law school education in preparing new graduates to begin the practice of law* (Unpublished doctoral dissertation).University of Iowa, Iowa City, IA.

Taylor, B. F., & Kroth, M. (2009). A single conversation with a wise man is better than ten years of study: A model for testing methodologies for pedagogy or andragogy [Electronic version]. *Journal of the Scholarship of Teaching and Learning, 9*(2), 42-56.

Thelin, J. R. (2004). *A history of American higher education.* Baltimore, MD: Johns Hopkins University Press.

U.S. Bureau of the Census. (2010). *The older population: 2010.* Retrieved from http://2010.census.gov

Yoshimoto, K., Inenaga, Y., & Yamada, H. (2007). Pedagogy and andragogy in higher education — A comparison between Germany, the UK and Japan. *European Journal of Education, 4*2, 75-98.

Yow, A. (2010). *Employers' perceptions of basic technology skills needed for workplace preparation in adult basic education* (Unpublished doctoral dissertation).Walden University School of Education, Minneapolis, MN.

Zhang, J. (2009). *Exploring education major focused adult learners' perspectives and practices of Web-based distance education in sixteen universities* (Unpublished doctoral dissertation). New Mexico State University, Las Cruces, NM.

Community Engagement Projects Executed According to University Policy

Soezin Krog[*]

University of South Africa, South Africa

Norma M Nel

University of South Africa, South Africa

B Ben-David

Forest Town School, Forest Town, Johannesburg, Gauteng. South Africa

Universities play a critical role in communities by means of community engagement which is considered a corner stone activity of higher institutions. One of the three focal areas on the University of South Africa's (Unisa) 2015 agenda for transformation is the community engagement policy, expressed as "Towards the African university in the service of humanity". This article illuminates aspects of Unisa's community engagement policy by way of two successfully completed community engagement projects. The first example consisted of a qualitative study which was undertaken at a special school in Gauteng, for learners with severe intellectual disabilities (SID). A "Learn not to Burn" mainstream curriculum was adapted to make it accessible for learners with SID. The results led to further community engagement activities. The second example relates to a qualitative, ethnographic study conducted in a rural area in Kwa-Zulu Natal with children with physical disabilities (CWPDs), exploring the negative influences of the rural community on them. Bronfenbrenner's bio-ecological systems theory was used to underpin the research. Ultimately the latter research led to an envisaged community engagement project. Based on the outcomes of the two successfully executed community research projects, we propose guidelines and success indicators for future university community engagement projects.

---

[*] Address for correspondence: Department Early Childhood Education. Email: krogs@unisa.ac.za

Introduction

Community, as described by Hall (2010:25) is " a cluster of households or an entire region, as an organisation ranging from a provincial government department to a Non-Government Organisation, a school, a clinic, a hospital, a church or a mosque or as a part of the university itself". Baradei and Amin (2010:109) state that because the word "community" has many implications, it could be referred to as "a network of shared interests and concerns". Communities can be based on different criteria such as geographic, ethnic and religious or even in relation to schools.

In light of the above definitions, higher education as a community benefits individuals by providing them with qualifications which result in high status employment and high lifetime earnings. In addition, universities offer private benefits to the corporate world by means of industry-sponsored research, journal articles and books which in turn profit commercial publishers; they benefit the public by providing access to education, skilling the workforce, contributing to economic growth, combating poverty, marginalisation and unemployment. Universities are part of the democratic process through the principles of institutional autonomy and academic freedom. They generate critique of economic and political power by educating a critical citizenry (Hall, 2010:27).

Based on the critical role which universities play in the communities, community engagement plays an integral role in the activities of higher institutions. Community engagement can thus be understood as a set of "public goods" which, for the purpose of this paper, emanates from higher education. For South Africa, this would mean addressing issues such as inequality, redressing inequities in the provision of education, housing, public health provision, countering HIV/AIDS and providing access to legal resources as a return on the investment of public funds in higher education (Hall, 2010:27). Community engagement can take on many forms such as distance education, community based research, participatory action research, professional community service and service-learning. "In its fullest sense, community engagement is the combination and integration of service with teaching and learning (e.g. service-learning), professional community service by academic staff and participatory action research applied simultaneously to identified community development priorities" (Council on Higher Education, 2006: 12).

The Draft White Paper on Higher Education (DoE 1997:8, 14–15, 32) states that although much is being done in the South African higher education system, it favours teaching and research policies, thus more needs to be done on regional and national levels to address the problems and challenges of the broader African context. One of the goals stipulated in the White Paper is that students need to become aware, promote and develop social responsibility of higher education, by way of community service, in social and economic development. At institutional level, it is important that higher education institutions have a social responsibility to the "common good" and this is done through the availability of expertise and the infrastructure of the institution for community service. As research is one of the focal areas at the University of South Africa (Unisa), it is thus an outcome of community engagement and is measured by peer-reviews, but also broader indicators, for example, on national level, national developmental needs, industrial innovation and community development.

The Council on Higher Education (CHE), Criteria for Institutional Audits (2004:3,6,9,19) focuses on two broad areas, namely the mission of the institution – linking planning, resource allocation and quality management and secondly, teaching and learning, research and community engagement. It is expected that attention should be given to transformational

issues in the mission and goals of the institution, which include community engagement. Quality management should be integrated into the planning of the institution. Financial planning will ensure adequate resource allocation in order to develop, to improve and to monitor the quality of the institution's core activities, namely teaching and learning, research and community engagement. Academic support services are needed to provide for teaching and learning, research and community engagement needs. Community engagement takes place by means of service learning, institutional engagement with local and broader communities and should be part of the institution's quality management policy. It should also be linked to teaching and learning, research and should be effected by means of the allocation of adequate resources (policies and procedures should be in place for quality management) and institutional recognition.To make community engagement possible, adequate resources should be allocated in order to facilitate quality. Community engagement delivery and the effectiveness of quality related community engagement arrangements should be reviewed regularly. However, "the production of excellent graduates, cutting edge research and innovative community engagement programmes depends not only on the availability of efficient quality assurance mechanisms but also on the sustained nourishing of a community of students and scholars" (Council of Higher Education, 2006:3).

"The quality of community-university engagement is only as good as the quality of the individual partnerships through which the engagement is enacted" (McNall, Reed, Brown & Allen, 2009).These authors believe, based on their research, that to co-create knowledge through effective partnership management and opportunities, conscious nurturing of practices need to be worthy of deliberate cultivation within community-university. A robust scholarship of engagement include valuing scholarship of engagement as legitimate scholarly pursuit; community engagement must be seen as an opportunity for research, with a substantive focus as well as the engagement; there must be an intentional orientation towards partnerships and plan for continuous assessment of the partnership process and the outcomes should be right from the beginning. Other elements include internal funding for community-based participatory research; fellowships for participating students and technical assistance when evaluating community-university partnerships (McNall et al., 2009:325, 327, 329).

There is a wide range of conceptualisations as to what community engagement is (in a university environment) and, in general, they include a number of activities such as curricular and extra-curricular activities and sometimes research activities (Hall, 2010:36). These activities are briefly discussed below, according to the Council of Higher Education (2006).

Student community engagement includes experiential learning, such as volunteerism, community outreach, internships, cooperative education or service learning. Volunteerism sees the students providing a service to the beneficial recipient community and the field of delivery is not necessary his or her field of study. It is an extra-curricular activity for which students do the fund raising by approaching donors. Clary and Snyder (1999:156–159) have identified six basic functions that are served by a volunteer namely to act on important values such as humanitarian express; to learn more about the world or exercise skills that are often not used; to grow and develop psychologically through volunteer activities; to gain career-related experience; to strengthen social relationships and to reduce negative feelings, such as guilt, or to address negative problems. Appeals for volunteers are most effective if they recognise that different individuals have different reasons for engaging in such activities.

Community outreach consists of students engaged in activities in order to provide services to a primary beneficial recipient community. Emphasis is placed on structure and commitment,

as well as on student learning. These distinct projects are initiated by various departments of university faculties, who could provide recognition in the form of academic receiving credits or research publications.

Internships focus primarily on the students learning activities, wherein they gain hands on practical experience which enhances further understanding of their field of study, the achievement of learning outcomes and gaining vocational experiences. Internships are fully integrated into the student's curriculum (e.g. psychology, social work and teaching).

Cooperative education programmes focus primarily on the students and learning.Programmes are co-curricular in nature, providing related opportunities, but not necessarily integrated with the curriculum. Students are placed within the industry to enhance and enrich their understanding of the area of their study.

Service-learning sees students and community engaged in activities as primary beneficiaries. The primary goal is to provide community service as well as to enhance student learning. Community service is integrated with scholarly activities such as learning, teaching and research. It sees scholarly activities and community services being enriched vice versa by the engagement.Service learning proposes the development of high education in relation to the needs of the community (Council of Higher Education, 2006:15)

It should be noted that "The quality of community-university engagement is only as good as the quality of the individual partnerships through which the engagement is enacted" (McNall et al., 2009). This article provides a conceptual framework for community participation in education from a particular university perspective.

Unisa's Community Engagement and Outreach Policy

The Unisa 2015 agenda for transformation,"Towards the African university in the service of humanity" is a characteristic of an engagement with society. The focus is on improving research and teaching and learning with the main aim of serving the community by providing experiential learning, knowledge application, career opportunities, knowledge creation and academic discourse (Unisa CE and Outreach policy, 2008:8).

The aims of community engagement and outreach include a variety of essential aspects. Outreach to communities in need should be on a volunteer basis, nurturing and promoting the community. Best practices should be promoted such as the integration of curriculum-based community engagement with teaching, learning and collaborative research and recognising the valid pedagogy found in scholarship of community engagement. Sustainable partnerships with communities should be established by regulating community engagement and outreach and establishing principles for planning, implementing, monitoring and evaluating community and outreach activities as well as promoting, recording and coordinating community engagement and outreach (Unisa CE and Outreach policy, 2008:8)

Within Unisa's community engagement and outreach policy, community engagement is defined as "initiatives and processes through which issues relevant to its community are addressed by means of community engagement and outreach". Community engagement finds expression in a variety of forms, such as informal and relatively unstructured activities to formal and structured academic programmes. **"Community engagement is a two-way interaction between the university and the community with which the university forms partnerships that yield beneficial outcomes for both the community and the university"** (Unisa

CE and Outreach policy 2008:8). Whereas *community outreach* is a "voluntary outreach to communities by academics, university employees, alumni or students in response to the social, economic and political needs of the communities. It is also seen as a one-way initiative from the university, its students and alumni to communities". *Community-based or curricular community engagement* on the other hand is defined as "teaching, learning, and scholarship, which engages academic staff, students, and the community (service sectors) which is mutually beneficial as well as a respectful collaboration".

Principles regarding community engagement and outreach.

This entails teaching, learning and research as the core functions of community engagemnt and outreach on a university level. Social, environmental, economic and cultural development of a community is promoted which is a mutually beneficial interaction between Unisa and the community. Collaborative development of academic programmes and research projects which enable partnerships and relationship building is engendered. Through community engagement and outreach the curriculum, teaching and learning and research are contextualized, enhanced and enriched by means of consultation with the community. By determining institutional parameters to monitor and evaluate community engagement initiatives they can be incorporated into a strategic resource allocation model.

Community engagement projects are seen as community needs driven and aligned to Unisa's needs regarding teaching, learning and research. The assessment of community engagement has to be linked to theory and practice, including an annual evaluation of community engagemnt in teaching and its impact in the effectiveness of community engagement.

Curriculum related community engagement is offered through formal accredited programmes (certificates, diplomas, degrees, short learning programmes) and the purpose being service learning. Both the students and the community are primary beneficiaries. Non-curriculum related community engagement initiatives benefit both the community and the employees. However, there is no link between curriculum and research. There is no financial gain that is provided except if an honorarium is paid. *Research-related community engagement* is a scientific knowledge which is advanced due to community engagement. The research capacity of the university is utilised to address the community's problems while the community act as a partner. Research is opportunity-driven with the aim of community development and capacity building aimed at skills and social development.

On the other hand, *community outreach* is not considered a core function and it is effective if it enhances Unisa's image. All outreach programmes need to be monitored by the department/centre/institute/region involved. It remains voluntary outreach (one-way initiative) by academics, students, alumni and staff to communities in response to social, economic and political needs.

Unisa's CE and outreach policy needs to link with existing policies such as the tuition and research policies. Formalised quality assurance arrangements need to be in place and community engagement must be integrated with those of teaching, learning and research. Research proposals involving community engagement must be submitted to research committees for approval and there must be a budget for all community outreach initiatives.

Development and delivery of CE and outreach programmes

This consists firstly of the conceptualisation phase, which requires the determination of the community needs, building teams and partners, developing curriculum in collaboration with community leaders and service agencies in order to integrate theory and service as well as conducting a feasibility study. Secondly, the implementation phase is required to prepare students for the community engagement projects. This entails equipping them with knowledge regarding negotiation techniques, research methods, mentoring, logistics, resources and allocation. A third most important consideration in the implementation phase is ethical requirements. The policy on Research Ethics needs to be applied for community engagement and outreach. Fourthly, the impact of community engagement and outreach needs to be determined in order to ascertain the partner and community satisfaction; changes in the quality of community life resulting from community engagement and outreach; changes in the quality of learning and research.

The teaching and learning functional plan of Unisa (February 2012)

This plan includes fostering active community engagement that enables the establishment of partnerships and collaborations with relevant stakeholders and the opportunity to do community engagement across the country. There is a further necessity to grow community engagement initiatives. Various strategies have been envisaged, namely refinement of the scope and the extent of community engagement in context of open and distance learning (ODL), which includes meeting the 2015 target of at least six community engagement projects per college; developing a community engagement impact assessment by 2014 and community engagement quality management system by 2014; developing a funding model for community engagement by 2013, which will be implemented in 2014. A further strategy includes building an enabling environment for community engagement. The need has been identified to build community engagement partnerships by 2013 and an impact assessment will be done in 2015.

Seeing that the main focus in this paper is on community engagement within the education sector. Baradei and Amin (2010:113) look at the community approach to education as it is the main component of the "emerging paradigm for inclusive education", which is dominant in primary education reforms. It incorporates seven main principles. namely the right of all children to primary education; a child-centred approach to education; quality improvement; providing for responsive education; provision is a shared responsibility that means that schools are considered an integral part of the community; recognition of diverse needs and committing to a holistic approach to education. Dreyer (2008:82) explains that the emphasis on ensuring social justice for all learners is growing as the focus is on developing autonomy.

The presenters have a galvanised concern about the state of education in South Africa and this mobilised them to address the problem by making adaptations to a mainstream curriculum for students with severe intellectual disabilities. To understand a community engagement project in terms of the community involved, the authors present a community engagement project titled: "*Differentiated instructional practices teachers employ to teach a specific curriculum to learners with severe intellectual disabilities"*,which was initiated in 2010 and completed in 2011. This project is aligned with the Unisa Community Engagement and Outreach policy. Similarly, a doctoral student gives an account of her research study she conducted in rural Kwa-Zulu Natal titled "*The impact of negative influences facing children with physical disabilities in rural areas"* and how it led her to become involved in community engagement.

PROJECT 1 (Completed according to Unisa's research related community engagement)

Differentiated instructional practices teachers employ to teach a specific curriculum to learners with severe intellectual disabilities

Introduction

South Africa has embraced inclusion and, in doing so, adopted principles guiding the transition towards greater inclusion. These principles are based on the international declaration: "Education for all" (UNESCO, 2005:13), the Constitution of the Republic of South Africa (1996), the South African Schools Act 84 of 1996, Education White Paper 6 (Department of Education, 2001) and Guidelines for full Service/Inclusive Schools (Department of Basic Education, 2009). In moving towards greater inclusion, attention is drawn to a flexible system in which the needs of a diverse population is served as inclusively as possible (Department of Education, 1999). Furthermore, White Paper 6: Special needs education (Department of Education, 2001) perceives an inflexible curriculum as "the most significant barrier to learning" and argues in favour of a flexible curriculum.

The "Learn not to Burn" community project was conducted over a period of 12 months in the context of a public special school in Gauteng. The school caters for learners with severe intellectual disabilities, however there are learners who have multiple disabilities.

Research objectives of Project 1

The objective of this research was to describe teachers' and therapists' perceptions of and insights into their experiences of teaching a differentiated curriculum and using differentiated instructional practices. A qualitative research design was used in this research pilot in order to learn about the views of the participants and to report their stories, building and understanding from the ground up in their context and setting (Creswell, 2007). A descriptive design, ethnography was employed which concentrated on the behavioural regularities and the interaction between people, within a group/s in a community/organisation (Welman, Kruger & Mitchell, 2008:193). Contextual validity by means of triangulation was ensured with the use of photographs, video clips of participants whilst engaging in activities as well as focus group interviews, completion of questionnaires and journal analysis by teachers and therapists.

The Early Childhood Development Institute's learn not to burn inclusion community and research project

The "Learn not to Burn" (LNTB) inclusion project was the initiative of the Early Childhood Development Institute (ECDI) of the Gauteng Department of Education in collaboration with Unisa, the Johannesburg Emergency Services and the special school. During the inclusion, research project valuable partnerships were established between a special school in Gauteng, Unisa and the Johannesburg Emergency Services. During the research, the programme entitled "Learn not to Burn", a pre-foundation, mainstream burn prevention programme, was adapted and implemented to suit the needs of learners with severe intellectual disabilities (SID).

Consultants and relevant stakeholders originally developed the LNTB programme, and endorsed by the World Health Organization and implemented in the 1960's in the USA. The programme has proven to be the most successful in the USA and therefore in the 90s, this

programme was adapted to suit the specific South African context. Although statistics indicate that Africa has one of the highest burn mortality rates in the world and that 77% of structural fires take place in residential properties, limited fire safety training is provided to learners in South Africa. The ECDI has recognised the problem fire related accidents pose to young learners and has therefore taken a decision to drive the programme in South African schools. This LNTB programme consists of ten lessons, focussing on fire safety education which contain essential and practical life skills such as awareness of dangerous situations in and around the house as well as emergency phone numbers. The LNTB programme is designed in such a way that learners can be equipped with knowledge and skills related to fire safety and to change learners' behaviour when they are confronted with to deal with an emergency related to fire.

Before the project could be initiated, the researchers prepared a proposal which was tabled at the university school of education, in order to accept it as a feasible project. The following aspects were taken into consideration and a full description of each was prepared.
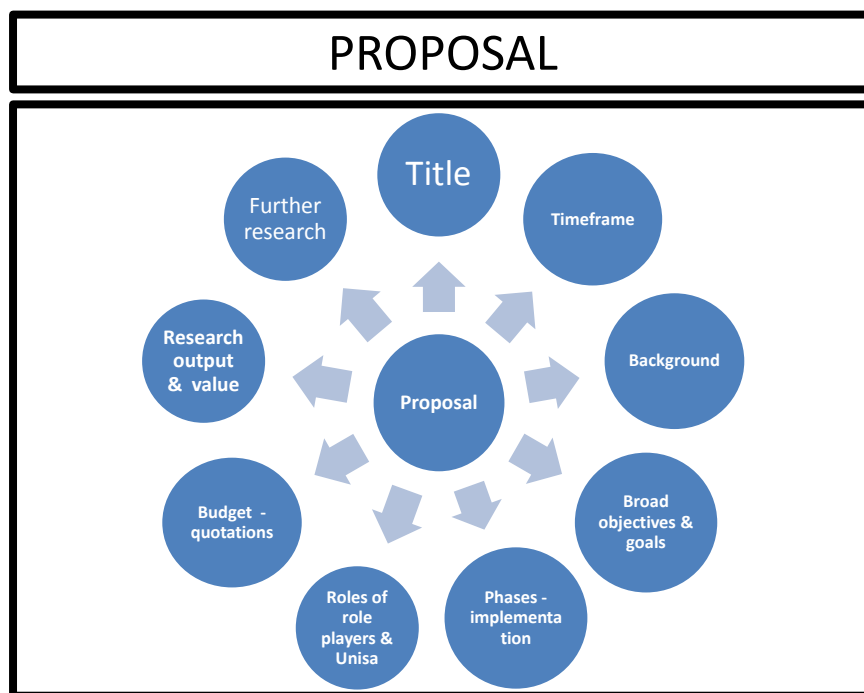
Figure 1: Proposal for the LNTB community engagement project

During the LNTB community and research project, the ECDI, Unisa and the Johannesburg Emergency Services were available and present to offer advise and consult with teachers and therapists. Meetings were frequently held with the principal and deputy principal to monitor the progress of the implementation of the LNTB differentiated curriculum. The teacher and therapist activities, the collaborative meetings held on a regular basis as well as individual interviews with the teachers and therapists were captured in field notes by the principal of the school as it contributed in the writing an article which was published in an accredited journal as well as the writing up of her doctoral thesis. The activities included teachers' use of a variety of teaching strategies to teach the ten fire safety lessons. In addition they to resorted to scaffolding, that is to break the lessons up into steps which learners could manage; to make use of repetition in order to grasp, which to the learners with SID, were experienced as difficult concepts and importantly to harness the learners senses such as the visual modality

and to combine it with play activities. By making the activities practical and hands-on made it easier for the learners to remember facts and to apply the skills and knowledge they had learnt more easily.

In order to enforce the safety messages of each lesson and to promote understanding of the concepts (in particular for non-verbal learners and those who have limited speech and speech inpediments) , the teachers and therapists combined songs with movement, art, poetry, games and drama. To promote language development, vocabulary extension exercises were incorporated in each lesson. The use of pictures accompanied by the spoken word was imperative to enable the teachers and therapists to convey the messages of each lesson.

To teach social skills and etiquette, the teachers and therapists made use of group activities. They also needed to make specific adaptations to the physical and social environment by for example enlarging (in bold) the print accompanied by simple pictures on worksheets. The classrooms had to be organised in such a way that the furniture was place in a way for wheelchair accessibility. All these efforts demanded innovation and creativity from the teachers and therapists in their quest to appropriately and effectively differentiate the curriculum for the learners with SID to access the LNTB curriculum. Learners interests, learning styles and strengths as well as differentiated teaching methods, learner support materials and assessment processes had to be considered at all times when devising the lessons.

These efforts which were made to differentiate the curriculum by making appropriate adaptations and accommodations proved to be successful and to the benefit of the learners with SID. The ten fire safety lessons were successfully taught as the learners could demonstrate their understanding and apply their knowledge of the ten core fire safety messages.

The project was conducted in the following phases:

Table 1: The phases in which the LNTB community engagement project was executed

PHASES	PROCESS	CONTENT
Phase 1	Identification/Selection	• Problem Identification • Project goal • Context • Role players
Phase 2	Planning	• Writing a CE proposal & presentation to College Management Committee • Registering of CE project & ethical clearance and permission • Research plan • Management plan (research plan, budget, resources)
Phase 3	Implementation	• Execution of planned activities (research activities & skills/knowledge sharing) • Addressing needs
Phase 4	Finalisation	• Research findings & conclusion • Writing of academic article • Presentations & conferences (upcoming conference at Unisa "Exploring community engagement trends in an African developmental context" 22 – 23 March 2012)

Conclusion

In this study, the benefits for the school community were based on differentiating the LNTB curriculum by making the appropriate adaptations and accommodations in an effort to

cater for learners with SID. As the teachers and therapists were challenged to be creative and innovative in preparing hands-on practical activities and providing instructional adaptations, accommodations and differentiation of the "Learn not to burn" fire safety programme it contributed to the enhancement of the pedagogy of the school as the individual teacher's knowledge and skills in curriculum differentiation were developed.

An outcome of the research project, which is not reported in this article, was the training of teachers at six neighbouring special schools (at the special school where the research was conducted) on how adaptations and modifications of the LNTB curriculum, as it pertains to their specific context, could be done. The Unisa researchers, in their advisory and research capacity, attended most of the training sessions which took place twice a month during 2012. The adapted LNTB curriculum was also integrated in the Early Childhood Development (0-4 years) curriculum for the Gauteng Department of Education and training of this curriculum for practitioners will take place in the near future.

The findings of the study have further implications for research in the field of early childhood development, curriculum differentiation and teacher training. However, the researchers, would need to look at other special schools which cater for students with different disabilities, such as autism, blindness, cerebral palsy and deafness, as there are further challenges faced by teachers in differentiating the curriculum for these learners.

In conclusion, an important finding of the LNTB research project is that the involvement of Unisa led to the building of valuable partnerships in education. The symbiotic partnerships established during the research programme served as an example in which theory and practice were integrated in order to enrich the learning experiences of students with SID. Through effective partnerships, with the ECDI, the special school participating in the research and the other schools which came on board the training by this school as well as the Johannesburg Emergency Services has led to continued collaboration. This happens in the form of a stakeholders forum where various stakeholders meet and network to further the interests of the ECD sector of education and to table concerns which can be taken to the Department of Education policymakers and authorities via the ECDI. Conferences and seminars are also held as a platform to share with stakeholders, important issues regarding ECD. The researchers are convinced that this project was in line with Unisa's community engagement policy.

Project 2

Community engagement in the rural areas of South Africa and Urie Bronfenbrenner's Bioecological model

I, Brenda Ben-David, graduated as a PhD in 2012 at Unisa. The title of my thesis is "*The impact of negative influences facing children with physical disabilities in rural areas*". It is as a result of my rich experiences doing qualitative and ethnographic research that I have realised the importance of community engagement in our rural areas. Purposeful sampling (Creswell, 2007:125) was used to select members of the community, peers, teachers, family members, the community leader, *sangomas* (witch doctors) and children with physical disabilities (CWPD's) aged 6-9 years. Forty participants were selected and consent was obtained from the participants. Ethical clearance was granted by Unisa. The research was conducted in four rural areas in the Estcourt town vicinity, KwaZulu Natal. A local community based rehabilitation worker negotiated *Entrée* to the field and the skills of a gatekeeper was employed to do all the translations in the the interviews. The data collection

instruments (which was done with and for the community) were observations of CWPD's in school and out of school, questionnaires completed by teachers, interviews conducted with community members, peers, teachers, family members, the community leader, *sangomas* (witch doctors) and children with physical disabilities (CWPD's), photographs of homes, schools, lack of resources and any other areas relevant to the study and drawings of CWPD's. I lived in the community in order to observe and experience rural life. An analytical approach of data analysis was used for the qualitative study (Watt, 2007:95) and two independent coders were used to code the data and to identify the major themes and categories.

The theoretical framework used in this study was that of Urie Bronfenbrenner's bioecological model which is a wonderful and powerful framework for community engagement in our rural areas. A bioecological view of community development is and can be created within the psychological, social, cultural, educational, physical and economic conditions that surround the community's lives in the rural areas. Communities provide the template for most of these conditions and therefore community engagement enables communities to participate in order to optimise opportunities for all.

BRONFENBRENNER'S BIOECOLOGICAL PERSPECTIVE ON THE INCLUSION OF CHILDREN WITH PHYSICAL DISABILITIES

This is the **Microsystem** and refers to the activities and relationships with the immediate and extended family. If the family accept the child and include them in all family aspects, the foundations of inclusion will be solid.

This is the **Mesosystem.** It consists of linkages and interrelationships between two or more of the developing child's microsystems. If parents involve their children in all community activities and are themselves involved promoting inclusion, the child will be accepted by the community.

This is the **Exosystem.** Meaning outside, the child is not an active participant in this system. If school boards promote workshops and training, and parents workplaces are understanding inclusion is further promoted.

This is the **Macrosystem.** It consists of the society and subculture to which the developing child belongs. Almost the entire success of inclusion lies here in what the government does in terms of laws and necessary provisions.

This is the **Chronosystem** and involves temporal changes in ecological systems or within individuals, producing new conditions that affect development such as repairing the damages of the apartheid era

Figure 2: Bronfenbrenner's bioecological perspective on the inclusion of children with physical disabilities   Source: Ben-David (2012)

Community engagement in the rural areas is integral to the child's healthy development. Community engagement is central to community life in which information, services and resources converge on the one common goal of Unisa and that is helping all children to reach their developmental potential. Although family cultural factors and behaviours are major determinants of a healthy development, community engagement adds to the backdrop for this healthy development that is so needed in all areas of children's lives. Community engagement

will nurture connectedness through features of the physical landscape such as lack of roads, lack of facilities such as recreational facilities and libraries and opportunities for community interactions, attitudes of inclusiveness and tolerance. In addition, by looking at the exosystem and macrosystem levels on Bronfenbrenner's model (to be discussed later) and support services that are geared towards empowering the community and capacity development this connectedness is enhanced.

Community engagement nurtures the type of social climate in which people in the community tend to share goals, bond together to build their capacity and resilience in the face of the economic hardships of unemployment in the rural areas. These social networks of the community engagement need to be goal-directed. It was important to me to understand the breadth of community factors that can provide support for all the community. This could not have been achieved without having immersed myself in this ethnographic study as a Unisa student.

Briefly, Bronfenbrenner's framework examines all influences on children's development, including parenting, family, school, community and two levels in which the child is not directly involved such as the school boards, municipalities, and the government that needs to bring out policies and laws which prevent aspects like discrimination and needs to ensure that all facilities such as clinics are both functional and funded. Since it was first introduced by Bronfenbrenner in 1979, the bioecological model contends that human development takes place through progressively complex, regular, reciprocal interaction between the child, persons, objects and resources that are available in the community. This perspective situates the community as the most powerful setting for the development of the child. The promise of good health and opportunities beyond primary school lies with parents who can meaningfully be engaged with the possibility of active community engagement. Unisa is instrumental in helping some communities by allowing its doctoral students to them to discover their needs. It was through this opportunity that I was able to identify the need for support and social interactions which is so essential in the rural communities as I realized that community engagement provides platforms for social interactions which can be empowering and help to sustain the community's viability.

It was through my interactions with the members of the community that I understood their need for self empowerment. None of them wanted to rely on government support or charities. One member of the community said, "*We just need a chance, we want to be our own bosses. This will give us and our children respect. I felt like my heart was bleeding blood when I found out about my son he must have a chance his heart must not bleed blood one day, Please Brenda come back and help us. I promise we will work hard we just need a chance to get us going*".

There are so many examples of my engagement with the community. I spent a week with grade 7 learners aged 13–17 years. They did not understand disability and did not want to have CWPDs involved with the exception of one or two learners. I asked one of the learners why she did not want to have a friend with a disability. The learner answered,"*They sit on wheelchairs*". I told the learners not to discriminate against people with disabilities. I also explained to them the expertise that wheelchair learners could have. Learners need some form of community engagement to understand that CWPDs are not useless.

After the discussion, one learners was still adamant that he could not have a child in a wheelchair as a friend as they could not run and play soccer. I then told him that all soccer

teams need someone to keep score, to keep track of fouls and those cheating and to hand out oranges and drinks at half time. The learner smiled at me and replied, "*Oh yes! That's a good idea*".

The time I spent with the learners intensified my strong belief that community engagement is so crucial and I am grateful that I had the opportunity to go to remote areas and change negative perceptions.

The mainstream teachers at the school were apprehensive about CWPDs after I had handed out questionnaires to them, but were grateful when I suggested my model. I had to visit a centre to watch and learn how to best accommodate learners with physical disabilities. The principal of the school asked me, "*When can you come and help and teach us*?"

Parents/caregivers start intervention with their CWPDs from birth to three years, from three to seven years the CWPDs receive ongoing intervention they attend mainstream schools where they can make their needs known, teachers interact with parents/caregivers

The centre is ongoing with all involved passing knowledge onto the next level and next group

- Parents
- Infants Birth to three years
- Ben-David's centre for promoting inclusion
- CWPDs 3-7 years
- Mainstream teachers and schools

Figure 3: The ongoing cycle of intervention for CWPDs in the rural areas.

Source: Ben-David (2012)

I came across a centre that was set up by a computer company for children to learn to use computers. They were not sure at the centre how they could accommodate CWPDs. We discussed at great length how and why it should be done and my gatekeeper begged me to help. I also met with the chief and induna (chief's helper). They were prepared to offer us land if only we could come and help. I also met with the ward councillors and the mayor They all loved the idea of the "community model" and were keen to be involved.

There are lot of opportunities in ALL rural areas for community engagement. It is crucial and

morally obligatory for an institution such as Unisa to be involved in community engagement. When I started with this project, I never thought I would become passionate about it and want to pursue it.

Below are illustrations of children who were sexually abused (cf. Figure 4). One drawing shows the detrimental effects of HIV/AIDS felt by a six-year-old girl who does not have a father or a mother. She has got a baby and is sad. Included is also a photograph which illustrates the remoteness (cf. Figure 5) and the need for my envisioned centre which is an example of Bronfenbrenner's idea of community engagement.

Figure 4: Illustrations of sexually abused children

Figure 5: The remoteness of a rural community

In conclusion, it is imperative for Unisa to continue to encourage research that would keep the needs of ALL children in rural areas on the agenda for policy and assist in planning for the exo and macrosystemic levels. This can be done by encouraging Masters and Doctoral students as well as academics to engage with the community through community engagement projects. This is in line with the Unisa Community Engagement Policy. A community engagement project will form part of the community engagement requirements of for example the College of Education; it will contribute to effecting change in the quality of community life; it will also contribute to enhancing formal accredited programmes, teaching, learning and research based on the results of the research in the community; it will also promote social, environmental, economic and cultural development and lastly it will ensure best practices through the integration of curriculum-based community engagement with teaching, learning and collaborative research.

Finally, community engagement should become the responsibility of all members of the community who wish to improve the quality of their lives.

Recommendations

The following recommendations and advices for the CHE and the Minister of Education are offered in Hall (2010:48) and need to be adhered to by Unisa staff: a revised policy aligning engagement with the third sector (civil society which is located between the family, the state and the market) of the university's core functions, namely teaching and research; provide incentives through state subsidy for teaching which will ensure that models of good practice for service learning are established and resourced to be an integral part of teaching and learning in higher education; third sector engagement should be an integrated part of teaching and research [Higher Education Quality Committee (HEQC) to revise the audit criteria]; that the National Research Foundation allocate funding for research about third sector engagement for case studies of good practice in third sector teaching and research.

With a view to become involved in UCECE's (Unisa Centre for Early Childhood Education) envisaged projects, it is important to use the success of the LNTB community engagement project, it's preparation of the proposal and gauging it's outcome against success indicators

underpinned by the Unisa Community Engagement and Outreach Policy (2008), to follow suit.

Answers to the following questions would have been indicative of how successful community engagement projects were:

- Did the staff and/or students and the beneficiaries have a common agenda?
- Did the CE project have the potential to scale?
- Was the project sustainable beyond the project?
- Were the staff and/or students agents of change and were they able to mobilise the communities?
- Were value systems and attitudes addressed at all levels?
- Was awareness created, for example, disability awareness?
- Whose needs and whose agenda were addressed?
- In the case of education, a rights driven approach was taken?

Further research needs to be conducted simultaneously while the current and envisaged projects are in progress in order to establish the impact that the training and other interventions have made and how sustainable they are.

Acknowledgements

Bibliography

Ben-David, B. 2012. The impact of negative influences facing children with physical disabilities in rural areas. PhD thesis, Unisa.

Bronfenbrenner, U. 1979. *The Ecology of Human development: experiences by nature and design.*MA: Harvard University Press.

Baradei, LE & Amin, KZ. 2010. Commuinity participation in education: a case study of the boards of trustees' experience in the Fayoum governorate in Egypt. *Africa Education Review* 7(1):107–138.

Clary, EG & Snyder, M. 1999. The motivations to volunteer: theoretical and practical considerations. *Current Directions in Psychological Science*8:156–159.

Council on Higher Education. 2004. Criteria for Institutional Audits, June 2004. Higher Education Quality Committee p i-27.

Council on Higher Education. 2006. A good practice guide and self-evaluation instruments from managing the quality of service-learning. Higher Eucation Quality Committee. June, 2006. P i-70.

Creswell, J.W. 2007. *Qualitative inquiry and research design: choosing among five approaches.* London: Sage.

Department of Education (DoE), 1997. The Draft White Paper on Higher Education. Pretoria.

Department of Education 1999. *Consultative Paper No.1 on Special Education: Building an Inclusive Education and Training System, First Steps.* Pretoria: Government Printers.

Department of Education (DoE). 2001. Education White Paper 6.Special Needs Education. Building an Inclusive Education and Training System. Pretoria, Elsen Directorate.

Department of Basic Education (DBE) 2009. *Guidelines for full-service/inclusive schools.* Pretoria:Department of Education.

Dreyer, LM. 2008. An evaluation of a learning support model in primary schools in the West Coast/Winelands area. Doctoral Thesis, Stellenbosch University.

Hall, M. 2010. Community Engagement in South African Higher Education. Kagisano no 6, January 2010.

McNall, M, Reed, CS, Brown, R& Allen,A. 2009. Brokering community-university engagement.*Innov High Euc* 33(5):317–331.

United Nations Educational, Scientific and Cultural Organization (UNESCO), 2005. *Guidelines for Inclusion: Ensuring Access to Education for All.* UNESCO 7, place de Fontenoy, 75352 Paris 07 SP, France ED-2009/WS/31. Available at: http://unesdoc.unesco.org/images/0014/001402/140224e.pdf Accessed on: 14/11/2011.

University of South Africa (Unisa). 2008. Unisa Community Engagement (CE) and Outreach Policy. www.unisa.ac.za Accessed January 2014.

Watt, D. (2007). *On Becoming a Qualitative Researcher: The Value of Reflexivity.* The Qualitative Report Vol.12, 1:82-101.

Welman, C, Kruger, F & Mitchell, B. 2008. *Research Methodology.* 3rd edition. South Africa: Oxford University Press.
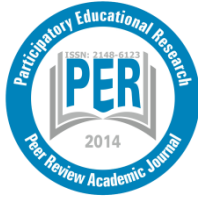
An Analysis of the Relationship between Internet Addiction and Depression Levels of High School Students

Cengiz ŞAHİN[*]

Ahi Evran University, Faculty of Education, Department of Physiological Counselling and Guidance, Kırşehir, Turkey

The concept of internet addiction refers to the excessive use of internet which in turn causes various problems in individual, social and professional aspects. The aim of this study is to determine the relationship between depression and internet addiction in terms of grades, sex, the existence of internet connection at home and time spent on internet. The study used survey model. The study group consisted of 369 adolescents from three high schools of different socio-economic background. Data was collected by means of "Personal Information Form", "Internet Addiction Scale" and "Beck Depression Inventory". Arithmetic mean, standard deviation, independent sampling t test, ANOVA and Scheffe tests were performed on collected data. The results of the study show that the internet addiction and depression scores of the adolescents are low and the internet addiction levels of ninth and tenth grade students with compared to the eleventh grade ones; of males with compared to females; of those having computer at home with compared to the ones having no internet at home and of the ones spending much more time on internet with compared to those spending less time have been found to be higher. No significant difference has been found between depression and internet addiction.

[*] Address for correspondence: *csahin@ahievran.edu.tr, csahin40@gmail.com*

Introduction

Internet is a worldwide information source that is easily reached via computers and rapid databases by every person. The computer network project developed with the aim of research, education and defence in 1960s has recently reached a new aspect including all activities such as research, education, social communication, politics, entertainment and trade which concern all people. Internet is the fastest developing electric technology in the world history (Musch, 2000; Hecht, 2001; Alkan & Canbay, 2011). The internet usage rate in our country was 13,3% in 2004, but it is 42,9 % in 2011. It is reported that the internet use frequency is the highest in the age group 16-24 and that in every age group, the rate of internet use of men is higher than the use of women (BTK, 2011; DPT, 2011; TUİK, 2011). Öztürk et al. (2007) indicated that internet addiction has become an important risk factor especially for the age group 12-18. Adolescents due to being not psychologically mature yet are regarded as a potential risk group in terms of getting addicted to internet (Üneri & Tanıdır, 2011).

According to some studies, it is indicated that the age group 13-19 generally use internet in order to play computer games, listen to music and meet new friends (Ata, Akpınar & Kelleci, 2011). Increasing internet use of students day by day and getting all kinds of information in an easy and uncontrolled way have led to many negative results (Karaman & Kurtoğlu, 2009). It is explained that while some people restrict internet use with the period they need to use, some people are not able to make restriction and have problems in their social and business lives (Ata, Akpınar & Kelleci, 2011). It is possible to mention both the negative and positive effects of computers and especially internet on people and society (Çalık & Çınar, 2009; Khasawneh & Al-Awidi, 2008; Kelleci, 2008; Weiner, 1996). Internet addiction can be said one of these negative effects (Chou, Condron & Belland, 2005).

Internet addiction term firstly used by Goldberg in 1995 has recently become a phenomenon which is tried to be described with different names such as 'net addiction', 'internet addiction', 'online addiction', 'internet addiction disorder', 'pathologic internet use' and 'cyber disorder' (Eichenberg & Ott, 1999). There aren't any standardized descriptions for 'internet disorder' (Chou, Condron & Belland, 2005) but its basic symptoms can be described as to be unable to limit internet use, to continue using internet in spite of social or academic damage and to feel deep anxiety when their internet use is limited (Öztürk et al., 2007). In the book The Diagnostic and Statistical Manual of Mental Disorders published by American Psychiatric Association (APA) in 2000 and abbreviated as 'DSM-IV-TR', internet addiction isn't still included as an disorder. It is claimed that the most similar disorder to internet addiction is 'pathologic gambling' (Köroğlu, 2001; Öztürk et al., 2007; Rehbein, Jukschat & Mössle, 2011; Şahin, 2011). Young (1998) who is the first to describe internet addiction and to determine its symptoms claimed that the most similar disorder to internet addiction which wasn't related to substance abuse was 'pathologic gambling' situated under the heading of impulse control disorder in the DSM IV (Hahn & Jerusalem, 2001; Arısoy, 2009).

Internet addiction term means using internet in an uncontrolled way which in turn causes individual, social and professional problems (Şahin, 2011; Şahin & Korkmaz, 2011). Recently, internet addiction has been regarded as a psychological problem relating various psychological problems and especially educators, psychological consultants, psychologists and psychiatrists have began to search for the issue (Zimmerl, 1998; Eichenberg & Ott, 1999; Morahan-Martin & Schumacher, 2000; Young, 2006; Ayaroğlu, 2002; Bölükbaş, 2003; Orhan & Akkoyunlu, 2004; Cengizhan, 2005; Esen 2007; Turnalar Kurtaran, 2008; Şahin, 2011). These studies have generally analyzed the relationship between excessive use of

internet and loneliness and depression; and having values not accepted by society and low emotional intelligence; and relationship with family especially with parents and friends; playing online games, searching, shopping and reducing social interaction; and individuals' psychological well-being; social, verbal, academic functions and depressive symptoms. As it can be seen, many scientists have tried to describe internet use concentrating on different aspects.

It is stated that one of the most common psychological disorder determined during psychological health services is depression as a mood change (Yüksel, 1984). Depression is a psychological mood change which has symptoms like sleep and appetite disorders, somatic symptoms, pessimism, bad feelings about ego, general dissatisfaction, loss of love and interest, crying spells, decreasing self esteem, negative expectations, self criticism, self blame, difficulties in decision making, loss of motivation, ideas about escape, withdrawal and revenge (Hisli, 1988).

Due to their ages, high school students have difficulties in accepting themselves and adapting to environment, in finding a place in society, in discovering their own identity and having the society confirm their behaviours. For that reason, they are more sensitive about assessing real life situations than adults are. It is seen that compared to adults, the young have problems related to depression because of that sensitivity (Ören & Gençdoğan, 2007).

One of the possible risk factors influencing internet addiction is their depression level and time spent on internet (Üneri & Tanıdır, 2011; Young, 2006). Adolescents' internet use leading addiction brings about various socially and psychologically negative behaviours apart from lots of developmental problems. That situation is an important contemporary problem about which teachers, psychological consultants, and especially parents should take care. Further studies on internet addiction need to be made considering also demographic features of individuals who often use internet and who are in the risk group.

Consequently, the study is thought to both differentiate from other studies and get important because it determines the relationship between depression and internet addiction in terms of grades, sex, the existence of internet connection at home and time spent on internet and accordingly, it aims to provide practical and tangible solutions to overcome the problem.

Aim of the study

The aim of the study is to determine the relationship between depression and internet addiction in terms of grades, sex, the existence of internet connection at home and time spent on internet. Within the scope of that aim, the following questions are tried to be answered:

(1) What are the levels of internet addiction and depression?
(2) Are there any differences between the levels of internet addiction and depression in terms of adolescents'
    (a) Grades
    (b) Sex
    (c) The existence of internet connection at home
    (d) Weekly time spent on internet.

Method

Study Model

This is a descriptive study in which a survey model was used. As it is known, survey models aim to indicate an existing situation as they are (Karasar, 1999). In this framework, we tried to determine computer games addiction and depression levels of the adolescents (high school students).

Study Group

The study group consisted of 369 students of 9th, 10th and 11th grades from three different high schools of different socio economic backgrounds in Kırşehir province. Table 1 shows the features of individuals attending in the study.

Table 1. Demographic features of Study Group

Adolescents'	N (369)	%
Grades		
9th grade	126	34,1
10th grade	138	37,4
11th grade	105	28,5
Sex		
Female	204	55,3
Male	165	44,7
The existence of internet connection at home		
Existent	186	50,4
None Existent	183	49,6
Weekly time spent on internet		
>0 hour	74	20,1
1-3 hours	166	45,0
4-7 hours	60	16,3
8< hours	69	18,7

Data collection

The data of the study was collected with 'Personal Information Form' developed by the researcher of the study to collect information about independent variables of the study, with 'Internet Addiction Scale' to identify levels of students' internet addiction, and with 'Beck Depression Scale' to make out levels of students' depression.

Personal Information Form: This form developed by the researcher includes questions on adolescents' demographic features (grade, sex, existence of internet connection at home, time spent on internet).

Internet Addiction Scale: The scale designed by Hahn and Jerusalem (2001) to determine internet addiction levels of the individuals and adapted into Turkish by Şahin and Korkmaz (2011) was used. The original title of the scale is "Skala zur Erfassung der Internetsucht". The scale contains 19 items and 3 factors. The first factor is "Loss of Control"; the second factor is "Tolerance Development" and the third factor is "Negative Consequences for Social Relationships". In order to test structural validity of the scale, Kaiser-Meyer-Oklin (KMO) and Bartlett test analyses were firstly performed. It was indicated that KMO= 0,919; Bartlett test value was $x2= 6087,383$; sd=171 (p=0,000). It was found that the items within the scale concentrated on three factors and explained 68.095% of total variance. Confirmatory factor analyses showed that the model had an acceptable adaptation. To calculate discriminative power of items, the correlations between the scores obtained from each item and the scores

obtained from the factors were calculated and it was found that each item had a significant and positive relationship with factor score. Internal consistency analyses were conducted to calculate internal consistency of the scale. Analyses showed that internal consistency coefficients of the factors varied between 0.887 and 0.926 and that internal consistency coefficient for the general of the scale was 0.858. In that study, it was also indicated that Cronbach's Alpha Coefficient was .890.

Beck Depression Scale: This is a self evaluation scale used mostly in depression studies. The scale consists of 21 items. Each item determines a behavioural feature related to depression. These items are evaluated by a scale grading from 0 to 3 in accordance with the severity of depression. Studies conducted in Turkey showed the scale was valid and reliable (Tegin1980; Hisli 1988; Hisli 1989). In the study which was conducted by Tegin (1980) and used split half and test- retest methods on university students revealed that the reliability coefficients were r=.78 for the first method and r=.65 for the second one. In the study conducted by Hisli (1988) on psychiatric sampling, the scale was used with the MMPI-D scale as a validity criteria and the correlation coefficient between these two scales was found as r=.63. According to results of another study conducted by the same researcher on university students, the split half test correlation was r=.74 and the internal consistency coefficient was r=.80 (Hisli, 1989). In one another study conducted with 146 students between the ages 14 and 20, test- retest reliability of BDS was determined as .73. Furthermore, it was reported that its correlation with Automatic Thoughts Scale was .58 (p<.001) and its correlation with Dysfunctional Attitudes Scale was .28 (p<.05) (Hisli, 1990). According to the scores obtained from the scale; scores between 10-17 means *low;* 18-29 *medium* and 30-63 *high (serious)* depression levels (Savasır & Şahin, 1997). In that study, Crobnach alfa coefficient was found as .760

Data analysis

In order to get answers of the questions mentioned in the study aims section, Arithmetic mean, standard deviation, independent sampling t test, ANOVA and Scheffe tests and r analysis were performed. For significant test, level of p<.05 is accepted. Furthermore, score ranges used to figure out internet addiction and depression levels are summarized in Table 2.

Tablo 2. Score Ranges for Levels of Internet Addiction and Depression

	Factors	Min. Score	Max. Score	Low	Medium	High
INT. ADDICT.	Loss of Control	7,00	35,00	7,00 – 16,33	16,34 – 25,66	25,67 – 35,00
	Tolerance Development	4,00	20,00	4,00 – 9,33	9,34 – 14,66	14,67 – 20,00
	Negative Consequences for Social Relationships	8,00	40,00	8,00 – 18,66	18,67 – 29,33	29,34 – 40,00
INTERNET ADDICTION		19,00	95,00	19,00 – 44,33	44,34 – 69,67	69,67 – 95,00
DEPRESSION		0,00	63,00	10,00 – 17,00	18,00 – 29,00	30,00 – 63,00

Findings

After the findings of analysis were performed to determine whether internet addiction level of adolescents in the study group show differences in accordance with independent variables or not, they were presented and evaluated in tables in this chapter.

1. Adolescents' Internet Addiction and Depression Level

Table 3 summarizes the findings related to adolescents' internet addiction and their depression level.

Table 3. Adolescents' Internet Addiction and Their Depression Level

	Variables	N	Minimum Score	Maximum Score	M	SD	Level
INT. ADDICT.	Loss of Control	396	7,00	29,00	10,44	4,36	Low
	Tolerance Development	396	4,00	20,00	5,64	2,85	Low
	Negative Consequences for Social Relationships	396	8,00	28,00	10,09	3,68	Low
INTERNET ADDICTION		396	19,00	70,00	26,18	9,36	Low
DEPRESSION		396	1,00	54,00	15,44	8,81	Light

Table 3 shows that adolescents' internet addiction and depression levels are low.

2.1. Adolescents' internet addiction and depression level in terms of grades

Table 4 indicates the findings related to adolescents' internet addiction and depression levels in terms of grades**.**

Table 4. Means, Standard deviations and Variance Analysis Results (ANOVA) of the Internet Addiction Levels of the Adolescents in terms of grades.

	Variables		N	M	SD	Source of Variance	Square Total	Degree of Freedom	Mean Square	F	p	Scheffe
INTERNET ADDICTION	**Loss of Control**	9. Grade	126	11,35	3,96	Between groups	522,838	2	261,419	14,75	,000	
		10.Grade	138	11,04	5,23	Within groups	6486,382	366	17,722			9-11 10-11
		11. Grade	105	8,57	2,72	Total	7009,220	368				
	Tolerance Development	9. Grade	126	6,19	2,34	Between groups	148,325	2	74,163	9,49	,000	
		10.Grade	138	5,89	3,66	Within groups	2858,455	366	7,810			9-11 10-11
		11. Grade	105	4,65	1,78	Total	3006,780	368				
	Negative Consequences for Social Relationships	9. Grade	126	10,95	4,16	Between groups	293,412	2	146,706	11,39	,000	
		10.Grade	138	10,34	3,91	Within groups	4713,076	366	12,877			9-11 10-11
		11. Grade	105	8,74	2,07	Total	5006,488	368				
	INTERNET ADDICTION (TOTAL)	9. Grade	126	28,50	8,99	Between groups	2705,705	2	1352,853	16,74	,000	
		10.Grade	138	27,28	10,97	Within groups	29564,393	366	80,777			9-11 10-11
		11. Grade	105	21,97	5,32	Total	32270,098	368				
	DEPRESSION	9. Grade	126	15,09	9,50	Between groups	49,058	2	24,529	,31	,730	
		10.Grade	138	15,34	8,10	Within groups	28518,161	366	77,918			
		11. Grade	105	16,00	8,89	Total	28567,220	368				

As it can be seen, as adolescents' grade levels are increasing, their internet addiction scores are decreasing. According to results of analysis performed to determine whether the observed differences are significant, it was found out that there were significant differences between sub dimensions including loss of control ($F_{(2-368)}$=14,75; P<.01), tolerance development ($F_{(2-368)}$=9,49; P<.01), negative consequences for social relationships ($F_{(2-368)}$=11,39; P<.01) and total scores of internet addiction ($F_{(2-368)}$=16,74; P<.01). In order to determine which groups caused the differences, Scheffe test were performed and the test results concluding the differences were observed between 9th and 10th; 9th and 11th grades.

Furthermore, it was pointed out that as adolescents' grade levels are increasing, their depression levels are increasing slightly. The observed differences were analyzed to determine whether the differences were significant or not and it was found out that the differences between adolescents' grades and their depression levels were not significant (F(2-368)=,31; P>.05).

2.2. Adolescents' internet addiction and depression levels in terms of sex

Table 5 presents the findings related to adolescents' internet addiction and depression levels in terms of sex.

Tablo 5. Results of Means, Standard deviations and t-test of the Internet Addiction Levels of the Adolescents in terms of sex.

	Variables	Sex	N	Score	Ss	Level	t	Sd	p
INT. ADDICT.	Loss of Control	Female	204	9,79	4,23	Low	-3,23	367	,001
		Male	165	11,25	4,39	Low			
	Tolerance Development	Female	204	4,97	2,31	Low	-5,19	367	,000
		Male	165	6,47	3,22	Low			
	Negative Consequences for Social Relationships	Female	204	8,88	2,36	Low	-7,55	367	,000
		Male	165	11,60	4,41	Low			
INTERNET ADDICTION		Female	204	23,64	7,81	Low	-6,06	367	,000
		Male	165	29,32	10,16	Low			
DEPRESSION		Female	204	14,97	7,45	Not	-1,15	367	,248
		Male	165	16,03	10,23	Low			

In the Table 5, it can be seen that females' internet addiction scores (23, 64±7, 81) are higher than males' internet addiction scores (29,32±10,16). According to statistical analysis, the differences between males' and females' internet addiction scores are not significant (t(367)=6,06; P<.01). Significant differences were found in terms of sub dimensions including loss of control (t(367)=3,23; P<.01), tolerance development (t(367)=5,19; P<.01) and negative consequences for social relationships (t(367)=7,55; P<.01). Moreover, male students had higher depression scores than female students and the difference was found as significant after performing analysis (t(367)=1,15; P>.05).

2.3 Adolescents' computer games addiction levels in terms of the existence of internet connection at home

The findings related to adolescents' computer games addiction levels in terms of the existence of internet connection at home are illustrated at Table 6.

Table 6. Results of Means, Standard deviations and t-test Adolescents' computer addiction and depression levels in terms of the existence of internet connection at home

	Variables		N	M	SD	LEVEL	DF	t	p
INTERNET ADDICTION	Loss of Control	Existent	186	11,37	4,45	Low	367	4,19	,000
		None Existent	183	9,50	4,07	Low			
	Tolerance Development	Existent	186	6,19	3,36	Low	367	3,80	,000
		None Existent	183	5,08	2,08	Low			
	Negative Consequences for Social Relationships	Existent	186	10,79	4,19	Low	367	3,70	,000
		None Existent	183	9,39	2,94	Low			
INTERNET ADDICTION		Existent	186	28,35	10,76	Low	367	4,60	,000
		None Existent	183	23,98	7,05	Low			
DEPRESSION		Existent	186	14,66	8,55	Light	367	-1,73	,084

	None Existent	183	16,24	9,01	Light

In table 6, it can be seen that internet addiction scores of students who have internet at home (28,35±10,76) are higher than the scores of students who don't have internet at home (23,98±7,05). The statistical analysis indicated that the differences between internet addictions scores of students with and without internet addiction at home were significant (t(367)=4,60; P<.01). In terms of sub dimension including loss of control (t(367)=4,19; P<.01), tolerance development (t(367)=3,80; P<.01), and negative consequences for social relationships (t(367)=3,70; P<.01), significant differences were concluded. It was found out that students with internet at home had higher scores than the students without internet at home. In order to determine whether the differences were significant, statistical analysis were performed and there found significant differences between adolescents' depression scores and availability and unavailability of internet at home (t(367)=1,73; P>.05).

2.4 Adolescents' internet addiction and depression levels in terms of the weekly time they spend on internet

In table 7, the findings related to adolescents' internet addiction and depression levels in terms of the weekly time they spend on internet are illustrated.

Tablo7. Means, Standard deviations and Variance Analysis Results (ANOVA) of the Internet Addiction and depression level of the Adolescents in terms of the weekly time they spend on internet.

Variables		N	M	SD	Source of Variance	Square Total	DF	Mean Square	F	p	Scheffe
Loss of Control	>0 hours	74	9,64	5,57	Between groups	904,938	3	301,646	18,03	,00	
	1-3 hours	166	9,59	3,31	Within groups	6104,281	365	16,724			0*8
	4-7 hours	60	10,05	2,60	Total	7009,220	368				1-3*8 4-7*8
	8< hours	69	13,69	4,87							
Tolerance Development	>0 hours	74	4,44	1,25	Between groups	432,897	3	144,299	20,46	,00	
	1-3 hours	166	5,51	2,45	Within groups	2573,884	365	7,052			0*1-3 0*8
	4-7 hours	60	5,05	1,12	Total	3006,780	368				1-3*8 4-7*8
	8< hours	69	7,73	4,51							
Negative Consequences for Social Relationships	>0 hours	74	8,94	2,91	Between groups	387,064	3	129,021	10,19	,00	
	1-3 hours	166	9,94	3,83	Within groups	4619,424	365	12,656			0*8
	4-7 hours	60	9,65	2,51	Total	5006,488	368				1-3*8 4-7*8
	8< hours	69	12,08	4,21							
INTERNET ADDICTION (Total)	>0 hours	74	23,04	7,99	Between groups	4779,354	3	1593,118	21,15	,00	
	1-3 hours	166	25,06	8,34	Within groups	27490,743	365	75,317			0*8
	4-7 hours	60	24,75	4,63	Total	32270,098	368				1-3*8 4-7*8
	8< hours	69	33,52	12,17							
DEPRESSION	>0 hours	74	15,79	7,06	Between groups	272,342	3	90,781	1,17	,32	
	1-3 hours	166	15,80	9,74	Within groups	28294,877	365	77,520			
	4-7 hours	60	13,50	6,64	Total	28567,220	368				
	8< hours	69	15,91	9,67							

The findings in Table 7 show as the time staying online is increasing, the scores of internet addiction are increasing relatively. According to the analysis performed in order to find out whether the differences are significant, the differences between internet addiction total scores

(F(3-365)= 21,15; P<.01) and loss of control (F(3-365)= 18,03; P<.01), tolerance development (F(3-365)= 20,46; P<.01), and negative consequences for social relationships (F(3-365)= 10,19; P<.01) were regarded as significant. To the results of Scheffe test carried out to determine which groups caused the differences, it was indicated that the differences were between the ones using internet eight and more hours and the ones using less. There observed some slight differences between the scores of adolescents' depression levels and the time they stay online. With the aim of getting out whether the differences were significant or not, analysis performed and they find out that there were significant differences between adolescents' depression scores and the time they stay online (F(3-365)=1,17; P>.05).

3. The relationship between adolescents' depression levels and their internet addiction

The findings related to the relationship between adolescents' depression levels and their internet addiction and its sub dimensions are shown in the Table 8.

Tablo 8. The results of relationship between adolescents' depression levels and their internet addiction and its sub dimensions.

	Variables		LC	TD	NCSR	INTERNET ADDICTION	DEPRESSION
INTERNET ADDICTION	Loss of Control-LC	r	1	,630(*)	,555(*)	,877(*)	,095
		p		,000	,000	,000	,069
	Tolerance Development-TD	r		1	,630(*)	,847(*)	,018
		p			,000	,000	,725
	Negative Consequences for Social Relationships-NCSR	r			1	,845(**)	,102
		p				,000	,051
INTERNET ADDICTION (Total)		r				1	,090
		p					,085
DEPRESSION		r					1
		p					

N=396   *p<.01

Table 8 shows the positive significant relationship among the sub dimensions of internet addiction; between control loss and tolerance development (r=,630; p<.000), negative consequences for social relationships (r=,555; p<.000) and total scores of internet addiction (r=,877; p<.000); tolerance development and negative consequences for social relationships (r=,630; p<.000) and total scores of internet addiction (r=,845; p<.000). The positive relations among sub dimensions show the sub dimension have effect on each other (P<.01). No significant difference has been found between depression and internet addiction (P>.05).

Discussion

In the study, d the relationship between depression and internet addiction were examined in terms of grades, sex, the existence of internet connection at home and time spent on internet.

In the study, it was determined that adolescents' internet addiction levels were low and their depression levels were light, which can be explained with the parents' sensitivity about their children internet use. We can also connect that situation with both individual success of students living in Kırşehir and their leading position among cities in the high school entrance

exam (OKS) and university entrance exams (YGS-LYS) in Kırşehir (Kirşehir MEM, 2012). That Kırşehir is an undeveloped city in terms of industry, that there are limited job and employment opportunities make the parents prepare their children for university entrance exam and make them be sensitive about their children's studying for that exam. For that reason, it can be understood that the parents are careful about their children's spending less time on internet. Moreover, that situation may depend on the fact that internet addiction is diagnosed only with addiction scale evaluations without performing any clinical evaluations (Üneri & Tanıdır, 2011). That finding is consistent with the other studies in the literature. In Turkish and foreign literature, there are various studies showing the number of young people addicted to internet is really low (Özcan & Buzlu, 2005; Ceyhan, Ceyhan & Gürcan, 2007; Saville et al., 2010). Similar studies demonstrate that most of the individuals have very low level of internet addiction (Niesing, 2001; Hahn & Jerusalem, 2001).

In that study, it was indicated that the eleventh graders had higher internet addiction scores than the ninth and tenth graders. The findings can be interpreted like that students feel relieved after high school entrance exam (OKS) and they spend more time on internet but in time they limit the time they spend on internet as university entrance exams (YGS and LYS) are approaching.

When internet addiction scores are evaluated in terms of sex, it is indicated that males have higher scores than females. The finding can be understood that male sex is a risk factor for internet addiction. So, male students using computer should be checked more carefully than female students should be. Most studies in the literature show that male students' addiction levels are higher than female students' scores (Betül Yılmaz, 2010; Ceyhan & Ceyhan, 2007; Jang et al, 2008; Durak, Batıgün & Hasta, 2010; Üneri & Tanıdır, 2011). Another study conducted by Hahn & Jerusalem (2001) shows that males use internet more than females but internet use of females are getting increasing in time. In the study conducted by Şahin (2011) and analyzing internet addiction levels of individuals in different ages, internet addiction levels of males were determined as higher than addiction levels of females. According to households information technologies use research, in our country females' internet use drop back males' internet use in every age group (BTK, 2011; DPT, 2011; TUİK, 2011). However there are some studies showing no differences between internet addiction and sex (Kim et al., 2006).

Internet addiction scores of individuals who have access to internet at home are determined as higher than the scores of individuals who haven't. In the study conducted by Üneri and Tanıdır (2011), they evaluated internet addiction of a group of high school students and they determined that there weren't any significant differences between internet addiction and having access to internet at home and between internet addiction and existence of computers at the adolescents' rooms.

Adolescents staying online longer were found to have higher level of internet addiction than ones staying online shorter. It can be said that students using internet more than three hours a day are tend to get addicted (Young, 1998; Hahn & Jerusalem, 2001; Yang & Tung, 2004). Studies in the literature show that as the time spending on internet is increasing, addiction level is increasing, too (Üneri & Tanıdır, 2011; Ata, Akpınar & Kelleci, 2011).

In that study, between depression score and internet addiction and its sub dimensions were found significant relation. This finding can be explained with the fact that students in the study group have both low internet addiction scores and low depression scores. In the

literature, studies show there is significant relationship between the time staying online and depression (Young and Rogers, 1998; Özcan & Buzlu, 2005; Üneri & Tanıdır, 2011). In the study conducted by Kim et al. (2006), adolescents with internet addiction have high level of depression and suicide opinions.

Conclusion and Suggestions

In that study analyzing the relationship between adolescents' internet addiction and their depression levels in terms of grades, sex, the existence of internet connection at home and time spent on internet, the following result have been established that the internet addiction and depression scores of the adolescents are low and the internet addiction levels of ninth and tenth grade students with compared to the eleventh grade ones; of males with compared to females; of those having computer at home with compared to the ones having no internet at home and of the ones spending much more time on internet with compared to those spending less time have been found to be higher. No significant difference has been found between depression and internet addiction.

As a result of the study findings, the following suggestion can be made for teachers, psychological consultants, school administrators, and parents:

- School psychological consultants should inform parents and students about possible negative situations brought about with internet use.
- Parents should be informed about their control on the time their children spend on internet.
- Adolescents are known to spend most of their time on internet apart from the time they spend for learning activities. So psychological consultants in schools should know about the literature on internet addiction. For that aim, further studies should be conducted to find out the situations of psychological consultants about that subject and if there are any problems, they should be tried to be solved.
- Psychological consultants should pay attention parents' concerns about their children's using computers for long hours.
- The findings of the study are limited with features of the study group. For that reason, it can be suggested that the study or similar studies be conducted in different school settings. Further studies which will be conducted with the students using computers in different areas, in different socio economic status and even in internet cafes.

References

Alkan, M. & Canbay, C. (2011).İnternet alan adları yönetimi, mevcut sorunlar ve çözüm önerileri [Internet domain name management, current problems and recommendations for the solutions].
http://www.tk.gov.tr/kutuphane_ve_veribankasi/raporlar/arastirma_raporlari/dosyalar/WEB_DE_YAYINLANAN_RAPOR.pdf..

Arısoy, Ö. (2009). Internet addiction and its treatment. *Current Approaches In Psychiatry*, 1(1), 55-67.

Ata, E.E., Akpınar, Ş. & Kelleci, M. (2011). Üniversite öğrencilerinin problemli internet kullanımı ile öfke ifade tarzları arasındaki ilişki.[The Relationship between Students Problematic Internet Usage and Their Anger Expression Manner].TSK Koruyucu Hekimlik Bülteni. [TAF Preventive Medicine Bulletin] 2011; 10(4): 473-480. Turkish.doi:10.5455/pmb.20110404060947

Ayaroğlu, N.S. (2002). *The relationship between internet use and loneliness of university students.*Yayımlanmamış yüksek lisans tezi, Orta Doğu Teknik Üniversitesi Sosyal Bilimler Enstitüsü [Unpublished master's thesis, Middle East Technical University, Institute of Social Sciences], Ankara.

Bölükbaş, K. (2003). *İnternet kafeler ve internet bağımlılığı üzerine sosyolojik bir araştırma: Diyarbakır örneği* [A Sociological Research On Internet Cafes and Net- Addiction: Diyarbakır Example]. Yayımlanmamış yüksek lisans tezi, Dicle Üniversitesi Sosyal Bilimler Enstitüsü [Unpublished master's thesis, Dicle University, Institute of Social Sciences], Diyarbakır.

BTK, (2011).Bilgi teknolojileri ve iletişim kurumu 2011 yılı raporu.[Information technology and communications agency report in 2011] http://www.btk.gov.tr/Yayin/pv/ ucaylik11_1.pdf [05.02.2012].

Cengizhan, C. (2005). Öğrencilerin bilgisayar ve internet kullanımında yeni bir boyut: Bağımlılık. [A new dimension in the students' use of computers and the Internet: Addiction.]*VIII. Ulusal PDR Kongresi*, Marmara Üniversitesi, [VIII. PCG National Congress, Marmara University] İstanbul.

Ceyhan E. (2008). Ergen ruh sağlığı açısından bir risk faktörü: İnternet bağımlılığı. [*A Risk Factor For Adolescent Mental Health: Internet Addiction*] *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, [Turkish Journal of Child and Adolescent Mental Health], 15(2), 109-116.

Ceyhan E. & Ceyhan A.A. (2007).An investigation of problematic internet usage behaviors on Turkish university students.*The Proceedings of 7.International Educational Technology Conference*.Near East University-North Cyprus.115-120.

Ceyhan E., Ceyhan A. & Gürcan A. (2007). The validity and reliability of the problematic ınternet usage scale. Educational Sciences: Theory & Practice. 7(1), 411-416.

Chou, C., Condron, L. & Belland, J. C. (2005). A review of the research on internet addiction, Educational Psychology Review, 17(4), 363-388. http://www.springerlink.com/ content/f412v76442303075/fulltext.pdf. [12.01.2012].

Çalık, D. & Çınar, Ö.P. (2009).Geçmişten günümüze bilgi yaklaşımları bilgi toplumu ve internet.*XIV.* [Past and present approaches to knowledge, information society and Internet. *XIV*]. *Türkiye'de İnternet Konferansı*, İstanbul: Bilgi Üniversitesi. [Internet Conference in Turkey, Istanbul: Bilgi University].

Durak Batıgün, A. & Hasta, D. (2010). İnternet bağımlılığı: Yalnızlık ve kişilerarası ilişki tarzları açısından bir değerlendirme [Internet addiction: an evaluation in terms of lonelinessand interpersonal relationship styles]. Anadolu Psikiyatri Dergisi, [*Anatolian Journal of Psychiatry*], 11, 213-219.

DPT, (2011). Bilgi toplumu istatistikleri 2011, [Information society statistics 2011] .http://www.dpt.gov.tr/DocObjects/View/12808/Bilgi_Toplumu_Istatistikleri_2011 .pdf.[10.02.2012].

Eichenberg, C. & Ott, R. (1999).*Internetabhängigkeit: Massenphänomen oder Erfindung der Medien?* [Internet addiction: A mass phenomenon or invention of media]19, 106-111. http://www.heise.de/ct/99/19/106/ [10.11.2012].

Esen Kıran, B. (2007). Akran baskısı ve algılanan sosyal destek değişkenlerine göre ergenlerde internet bağımlılığının yordanması [The prediction of internet addiction in adolescents according to the peer pressure and perceived social support variables]. *I.Uluslararası Bağımlılık Kongresi* [I.International Congress of Addiction], İstanbul.

Hahn, A. & Jerusalem, M. (2001). Internetsucht: Reliabilität und validität in der online-Forschung. [Internet addiction: reliability and validity in the research online] Online:http://psilab.educat.hu-berlin.de/ssi/publikationen/internetsucht_ onlineforschung_2001b.pdf [15.04.2011].

Hecht, B. (2001). Geschlechtsspezifische aspekte der internetsucht. [Gender-specific aspects of internet addiction] Online:http://psilab .educat.hu-berlin.de/ssi/publikationen /Diplomarbeit_Hecht_Internetsucht_20011101.pdf [15.04.2011].

Hisli, N. (1988). Beck Depresyon Envanterinin geçerliği üzerine bir çalışma [A study on the validity of Beck Depression Inventory].*Türk Psikoloji Dergisi* [Turkish Journal of Psychology]*,* 6(22), 118-126.

Hisli, N. (1989). Beck Depresyon Envanterinin üniversite öğrencileri için geçerliği ve güvenirliği [Validity and reliability of Beck Depression Inventory for university students].*Türk Psikoloji Dergisi* [Turkish Journal of Psychology], 6(23), 3-13.

Jang, K.S. Hwang, S.Y. & Choi, J.Y. (2008).Internet addiction and psychiatric symptoms among Korean adolescents.*Journal of School Health*, 78(3), 168-171. DOI: 10.1111/j.1746-1561.2007.00279.x. [19.01.2012].

Karaman, K.M.& Kurtoğlu, M. (2009).Öğretmen adaylarının internet bağımlılığı hakkındaki görüşleri [Teacher candidates' views on Internet addiction].*Akademik Bilişim'09* [Academic Computing 2009] - *XI. Akademik Bilişim Konferansı Bildirileri 11-13 Şubat 2009.*Harran Üniversitesi [Academic Computing Conference Proceedings 11-13 February 2009, Harran Üniversity], Şanlıurfa.*http://ab.org.tr/ab09/kitap /karaman_kurtoglu _AB09.pdf (05.05.2011).*[15.04.2011].

Karasar, N. (2009). *Bilimsel araştırma yöntemleri* [Scientific research methods].Ankara: Nobel Yayınları. [Nobel Publications].

Kelleci, M. (2008). The effects of internet use, cell phones and computer games on mental health of children and adolescents.*TAF Preventive Medicine Bulletin*, 7(3), 253-256.

Khasawneh, O.M. & Al-Awidi, H.M. (2008). The effect of home computer use on Jordanian children: A parental perspective. *J. Educational Computing Research*. 39(3), 267-284.

Kırşehir MEM. (2012). 2010-2011 öğretim yılı milli eğitim istatistikleri [National education statistics for the 2010-2011 term].http://www.arge40. com /upl/dokumanlar /haber/istatistik/index.html [07.02.2012].

Kim, K., Ryu, E., Chon, M.E., Yeun, E.J., Choi, S.Y., Seo, J.K. & Nam, B.W. (2006).Internet addiction Korean adolescents and its relation to depression and suicidal ideation: A questionnaire survey. *International Journal of Nursing Studies*.43(2), 185–192. http:// www.sciencedirect.com/science/article/ pii/S002074890500043/X.[15.011.2011].

Köroğlu, E. (2001). *DSM-IV-TR tanı ölçütleri başvuru el kitabı* [DSM-IV-TR diagnostic criteria handbook]. Ankara: Hekimler Birliği Yayımevi [Hekimler Birliği Pub.].

Morahan-Martina, J. & Schumacher, P. (2000).Incidence and correlates of pathological internet use among college students.*Computers in Human Behavior*, 16, 13-29. http://www.sciencedirect.com/science/article/pii/S0747563299000497. [15.04.2011].

Musch, J. (2000): Die Geschichte des Netzes: Ein historischer Abriß; [The history of the network: a historical summary] in: Batinic, B. (Hg.): Internet für Psychologen [Internet for psychologists]; Göttingen: Hogrefe Verlag, [Göttingen: Hogrefe Pub.] http://www.psychologie.uni-bonn.de/sozial/staff/musch/history.htm [15.04.2011].

Niesing, A. (2001). Zusammenhang des Persönlichkeitsmerkmals Impulsivität und Internetsucht. [Context of the personality trait impulsivity and Internet addiction] Diplomarbeit.Institut für Pädagogische und Gesundheitspsychologie.Humboldt-Universität zu Berlin.[Thesis.Institute of Educational and Health Psychology. Berlin: Humboldt-University] Online: http://psilab.educat.hu-berlin.de/ssi/ publikationen/ Diplomarbeit_Niesing_ Internet-sucht_20001201.pdf [15.04.2011].

Orhan, F. & Akkoyunlu, B. (2004).İlköğretim öğrencilerinin internet kullanımları üzerine bir çalışma [A study on the use of ınternet by prımary school students].*Hacettepe*

Üniversitesi Eğitim Fakültesi Dergisi [*Hacettepe Üniversity Journal of Education*]. 26, 107-116.

Ören, N. & Gençdoğan, B. (2007).Lise öğrencilerinin depresyon düzeylerinin bazı değişkenlere göre incelenmesi [The analysıs of the depressıon levels of the lycee students accordıng to some varıables].*Kastamonu Eğitim Dergisi* [Kastamonu Education Journal]. *15 (1), 85-92.*

Özcan, N.K. & Buzlu, S. (2005). Problemli internet kullanımını belirlemede yardımcı bir araç: "internette bilişsel durum ölçeği"nin üniversite öğrencilerinde geçerlik ve güvenirliği [An Assistive Tool in Determining Problematic Internet Use: Validity and Reliability of the "Online Cognition Scale" in a Sample of University Students]. *Bağımlılık Dergisi* [Journal of Dependence], 6(1), 19-26.

Öztürk, Ö. Odabaşıoğlu, G., Eraslan, D., Genç, Y. & Kalyoncu, Ö. A. (2007). Internet addiction: Clinical aspects and treatment strategies. *Journal of Dependence,* 8, 36-41.

Rehbein, F., Jukschat, N. & Mössle, T. (2011) Computerspielabhängigkeit im kindes und jugendalter. [Computer game dependency in the child and adolescent age] *Arzneimittel-, Therapie-Kritik &Medizin und Umwelt.* München: Hans Marseille Verlag GmbH. [München: Hans Marseille Pub.] http://www.marseille-verlag.de/Site/Content/Aktuelles/ Computerspiel-abh.pdf. [05.02.2012].

Savaşır İ. & Şahin N.H. (Ed) (1997) *Bilişsel davranışçı terapilerde değerlendirme: Sık kullanılan ölçekler* [Evaluation in Cognitive behavioral therapy: Frequently used scales]. Ankara: Türk Psikologlar Derneği Yayınları [Turkish Psychological Association Pub.].

Saville, K.B., Gisbert, A., Kopp, J. & Telesco, C. (2010).Internet addiction and delay discountingin college students.*The Psychological Record, 60, 273–286.http://opensiuc.lib.siu.edu/tpr/vol60/iss2/5/* [05.02.2012].

Şahin, C. & Korkmaz, Ö. (2011).İnternet bağımlılığı ölçeğinin türkçeye uyarlanması [Adaptation of internet addication scale to Turkish].*Selçuk Üniversitesi Ahmet Keleşoğlu Eğitim Fakültesi Dergisi* [Journal of Ahmet Keleşoğlu Educatıon Faculty]*, 32, 101-115.

Şahin, C. (2011).An analysis of internet addiction levels of individuals according to various variables. *TOJET – The Turkish Online Journal of Educational Technology*, www.tojet.net, 10 (4), 60-66.

Tegin, B. (1980). Depresyonda bilişsel bozukluklar: Beck modeline göre bir inceleme [Cognitive dysfunction in depression: a review according to Beck model]. Yayınlanmamış doktora tezi. Hacettepe Üniversitesi Sosyal Bilimler Entitüsü [Unpublished doctoral dissertation. Hacettepe University Institute of Social Sciences], Ankara.

TUİK, (2011). 2011 yılı hane halkı bilişim teknolojileri kullanım araştırması sonuçları [Household survey results in the use of information technologies, in 2011]. (http://www.tuik.gov.tr/PreHaberBultenleri.do?id=8572) [01.02.2012].

Turnalar Kurtaran, G. (2008). İnternet bağımlılığını yordayan değişkenlerin incelenmesi [Examining the variables predicting internet addiction].Yayınlanmamış yüksek lisans tezi. Mersin Üniversitesi Sosyal Bilimler Enstitüsü [Unpublished master's thesis. Mersin University Institute of Social Sciences].

Üneri, Ö. Ş. & Tanıdır, C. (2011). Bir grup lise öğrencisinde internet bağımlılığı değerlendirmesi: Kesitsel bir çalışma [Evaluation of internet addiction in a group of high school students: a cross-sectional study]. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi.* [Düşünen Adam The Journal of Psychiatry and Neurological Sciences] 24, 265-272. DOI: 10.5350/DAJPN2011240402 [05.02.2012].

Weiner, R. G. (1996). The internet culture: Transitions and problems.*ERIC Accesion Number: ED401898*. http://www.eric.ed.gov/PDFS/ED401898.pdf. [09.11.2011].

Yang, S. C. & Tung, C.(2004). Comparison of internet addicts and non-addicts in Taiwanese high school.*Computers in Human Behavior* 23, 79-96. http://dx.doi.org/10.1016/ j.chb. 2004.03.037.[09.11.2011].

Yılmaz, B.M. (2010). İlköğretim 6.ve 7. sınıf öğrencilerinin bilgisayara yönelik bağımlılık gösterme eğilimlerinin farklı değişkenlere göre incelenmesi [The analysis of elementary 6th and 7th grade students' computer addiction tendency according to different variables]. *Eğitim Teknolojileri Araştırmaları Dergisi* [Journal of Research in Educational Technology], 1(1), 617-622.

Young, K. S. & Rogers, R. C. (1998).The relationship between depression and ınternet addiction.*CyberPsychology & Behavior*. 1(1), 25-28. doi:10.1089/cpb.1998.1.25. http://online.liebertpub.com/doi/abs/10.1089/cpb.1998.1.25[09.10.2011].

Young K.S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychol Behav*. 1(3), 237-244. http://online.liebertpub.com/doi/abs/ 10.1089/cpb.1998.1.237?2. [09.11.2011].

Young, K.S. (2006). Addictive use of the Internet: A case that breaks the stereotype.Psychological Reports, 79, 899-902. Online: http://www.eric.ed.gov/ PDFS/ED401898.pdf. [09.11.2011].

Yüksel, N. (1984). Bilişsel işlevleri yönünden normallerle depresif hastaların karşılaştırılması [Comparison of depressed patients and normals in terms of cognitive functions]. Psikoloji Dergisi [Psychology Journal], 5(117), 14-15.

Zimmerl, H.D., Panosch, B. & Masser, J. (1998). *Internetsucht - Eine neumodische krankheit?*.http://gin.uibk.ac.at/gin/thema/gin.cfm?nr=11267 [09.11.2011].
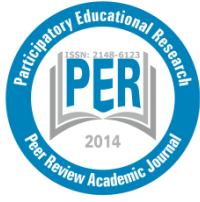
The Examination of the Views of Primary School Teachers and Preservice Primary Teachers on European Union Citizenship from the point of Different Variables: A Qualitative Study

Sadık Selman Üner[*]
Karabük University, School of Foreign Languages, Karabük, Turkey

Rüştü Yeşil-.
AhiEvran University, Faculty of Education, Kırşehir, Turkey.

The aim of this study is to determine the view of primary school teachers and pre-service primary teachers on European Union citizenship. This study is a descriptive and qualitative research. The data of the research was collected from 25 primary school teachers in the city center of Kırşehir and 33 pre-service primary teachers studying in Ahi Evran University, Faculty of Education, Department of Primary Education. As the data collection tool, Interview Form was used. The data collected from teachers and preservice teachers were ranged and compared according to their values of frequency and percent by classifying under themes. At the end of the research, it was understood that primary school teachers and preservice primary teachers saw EU as an interest group and EU citizens as individuals living for their interests. Also they thought that EU citizens live well. On the other hand, according to primary school teachers and preservice primary teachers EU citizens thought that Turkey and Turkish citizens were underdeveloped and threat and carried an opposing culture. Besides, primary school teachers thought that full membership in EU would do more harm than good for Turkey, while preservice primary teachers thought full membership of Turkey in EU would be more positive beside its negativeness.

[*] Correspondence: Sadık Selman Üner-Lecturer, Karabük University, School of Foreign Languages, Karabük, Turkey, E-mail: selmanuner@gmail.com Tel: +905072464427

Introduction

Although the relation between Turkey and European Union (EU) is seen as an issue of the last century, there was close relations between two societies in the past (Ortaylı, 2008). At the present, this old relation carries on as Turkey's being candidate state in EU. Full membership in EU, which has been discussed as an issue of both internal and foreign politics for years, stays popular in Turkish politics, even if it occasionally fall off the agenda.

EU becomes concrete by the concept of EU citizenship before the society. The concept of "EU citizenship" firstly formalized in Maastricht Treaty. In this treaty, it was stated that "*the citizens of member states are also the citizens of EU*". Besides, the rights and liability of EU citizens originated from this citizenship was determined by some treaties and conventions (Kaya, 2013: 142). Thus, the reality can be obviously seen that Turkish citizens will also be EU citizens in case of a probable full membership. In this regard, it can be said that raising consciousness of Turkish citizens about EU and EU citizenship is essential to diminish the problems in the process of target full membership and integration with EU.

The problem of integration with EU is not just a problem of Turkey as a candidate state but also a problem of member states. In some member states, mid-range accepting of Treaty of Maastricht, which is also known as the treaty founding EU, is an indicator of this problem (İnaç, 2005). Besides, in a research done by European Commission in 2012, EU citizens respond the question "Do you feel as a citizen of EU?" yes with rate of 61%, no with rate of 38% and not know with rate of 1%. Moreover, while the rate of the citizens identifying themselves just with their national identity is 38%, the rate of the ones using their national identity before European identity is 49%, the rate of the ones using European identity before their national identity is 6% and the rate of the citizens just identifying themselves as European is only 3% (Standard Eurobarometer 77, 2012: 21-24). That member states come across such a problem may signify that as a member state, Turkey will have similar problems. In this respect, if Turkey wants to be a full member in EU by reason of its government policy, it should take a step in terms of raising consciousness of its citizens about EU and EU citizenship.

As known, raising consciousness is independently an educational issue. Therefore, raising citizens' consciousness about EU citizenship should also be considered as a matter of education. Raising consciousness of citizens about EU citizenship properly may be possible with education. According to Erginer (2006), raising EU citizenship consciousness is definitely or vaguely regarded as a main principal in the objectives part of EU states' education systems. So, education is a phenomenon which should be emphasized to raise EU citizenship awareness.

In Turkey, compulsory basic education starts at primary school. Primary school is a four-year-old period which prepares pupils for the next compulsory eight year. According to most of researchers (Çubukçu & Gültekin, 2006; İbrahimoğlu, 2009; Sağlam, 2012; Yeşil, 2002), children considerably personalize and gain basic value judgments at this period. So it may be said that the education process raising EU citizenship consciousness of children should necessarily begin at primary school.

Schools, which are planned educational institutions (Doğan, 2012; Potter, 2002; Tezcan, 2012) and teachers, who have influence on students (Güven & Şahin, 2003; Karaman-Kepenekçi, 2008), have crucial roles in the process of an education to raise consciousness about EU and EU citizenship within the scope of an official point of view. Thus, primary

school teachers should have a point of view and carry out their work in parallel with this aim. In this regard, it is important to determine what kind of point of view primary school teachers, who play significant role in citizenship education, have on EU and EU citizenship. This is the main problem of this study.

Aim of the Research

The main aim of this research is to analyze the view of primary school teachers working in primary schools and preservice primary teachers studying at faculty of education, primary education department on EU and EU citizenship. In this context, primarily following questions are tried to be answered:

(1) What does EU and EU citizenship mean according to primary school teachers and preservice primary teachers?
(2) What are the views of EU states on Turkey and Turkish society according to primary school teachers and preservice primary teachers?
(3) How primary school teachers and preservice primary teachers see EU states in terms of politics, society, economy, culture, respect for human rights and democracy?
(4) What are the views of primary school teachers and preservice primary teachers on full membership of Turkey in EU?

Methodology

Research Model

This study is a descriptive and qualitative research. It tried to describe the views of primary school teachers and preservice primary teachers on EU citizenship

Study Sample

The study sample was comprised of 25 primary school teachers voluntarily filling the interview form and selected randomly from the schools in the city centre of Kırşehir and 33 pre-service primary teachers from 1st, 2nd, 3rd and 4th grades studying in Ahi Evran University, Faculty of Education, Department of Primary Education and voluntarily filling the interview form.

Data Collection

The data of the research was collected by "Interview Form" from the target teachers and preservice teachers groups. It was asked them to express their views in written to take their opinion freely.

Data Collection Tool

Interview Form: A semi-structured interview from (IF) was developed by the researchers to collect the data of the research. IF has the same questions for both teachers and preservice teachers.

In the process of developing IF, firstly 12 questions were prepared by taking account of the main and sub problems of the research; these questions were examined in terms of structure and content by the researchers with two different specialists and linguists and the questions were restructured in accordance with the suggestions. Finally, IF was composed of instruction

and five open-ended questions. Within the framework of these questions, the views of the primary school teachers and preservice primary teachers on EU and EU citizenship were tried to be determined. The questions in IF are below:

(1) What does European Union and European Union citizenship mean in your opinion? Please explain.
(2) Do you think how European Union states and citizens see Turkey and its people? Please explain.
(3) What do you think of European Union states in terms of politics, society, economy, culture, respect for human rights and democracy? Please explain.
(4) Do you think should Turkey be a full member in European Union? Why?
(5) What do you think about the probability of Turkey's full membership in European Union? Why?

Data Analysis and Interpretation

While the data collected by IF was being analyzed, main themes were formed for each question. Results of researches in the literature (Alkan, 2013; Altunay, 2012; Başbay & Doğan, 2004; Dinç, 2009; Özuğurlu, 2009; The German Marshall Fund of the United States, 2011) and the main and sub problems of the research was helpful to form the themes. The researchers arrived a consensus while naming the themes. The themes stated in the research are below:

Primary school teachers' and preservice primary teachers';

(1) Describing EU and EU citizenship
(2) Thoughts about the view of EU states on Turkey and its people
(3) Thoughts about EU in terms of politics, society, economy, culture, respect for human rights and democracy
(4) Thoughts about the necessity for full membership of Turkey in EU
(5) Thoughts about the probability of Turkey's full membership in EU

Then, the forms collected from the participants were examined by content analysis method and sub themes were formed under the main themes. Results of researches in the literature and the concepts and matters in related researches were tried to be considered while forming the sub themes. While forming the sub themes, firstly the researchers examined the forms on their own and formed sub themes. Then, they discussed on sub themes and reached a consensus on the same sub themes. The sub themes were formed by difference for each main theme. The first main theme has 11, the second one has 9, the third main theme has 7, the third one has 6 and the fifth main theme has 8 sub themes.

After that, the answers of the teachers and preservice teachers were evaluated under coherent sub themes. The thoughts of the teachers and preservice teachers were tried to be stated in more than one sub themes in case of including different sub themes. Frequency and percentage were used in evaluating the sub themes. Determining the percentage, the number of the participants for both groups was considered (25 teachers, 33 preservice teachers). The findings were shown in tables. Afterwards, the rates of the sub themes were ranged from more to less according to their choosing intensity and the subthemes were explained by using the frequency rates and percentages.

Lastly, the findings in tables were interpreted. The answers of the participants were quoted

while interpreting the sub themes. In these quotes, the primary school teachers and preservice primary teachers were enumerated for hiding their names and they were called with these numbers during the evaluation.

Findings

The findings got at the end of the research are shown in the tables below and explained:

Findings within the Main Theme of "EU and EU Citizenship Descriptions of Primary School Teachers and Preservice Primary Teachers"

The data of the first theme was collected and analyzed by asking primary school teachers and preservice primary teachers "What does European Union and European Union citizenship mean in your opinion". After the analysis, the range of the descriptions under 11 sub themes is given in Table 1.

Table 1. The thoughts of primary school teachers and preservice primary teachers about EU and EU citizenship

Theme	Sub themes	Teacher		Preservice Teacher	
		f	%	f	%
EU and EU citizenship	**Liberty**	5	20	7	21.21
	Welfare	9	36	14	42.42
	Democratic/Knowing their rights and liabilities	4	16	12	36.36
	Self-disciplined/Successful	2	8	3	9.09
	Interest Group	9	36	14	42.42
	Christian Association	8	32	2	6.06
	Trade and Travel Liberalization	5	20	6	18.18
	Consumption Culture	2	8	0	0
	Tolerant/Respectful	3	12	8	24.24
	Colonialism	2	8	1	3.03
	Nothing/Insignificant	2	8	4	12.12

In Table 1, thoughts of primary school teachers and preservice primary teachers about EU and EU citizenship were shown. According to the thoughts of primary school teachers about EU and EU citizenship, the sub themes of "interest group" and "welfare" were chosen at most with the rate of 36%. Preservice primary teachers also chose these sub themes at most with the rate of 42.42%. Primary school teachers at the least chose the sub themes of "self-disciplined-successful", "consumption culture", "colonialism" and nothing/insignificant" with the rate of 2%. Preservice primary teachers chose the sub themes of "colonialism" with the rate of 3.03% and "Christian association" with the rate of 6.06% at the least. Besides, there was no thought of preservice primary teachers about the sub theme of "consumption culture".

Some of the answers of the teachers (T2, T3, T4, T7, T8, T11, T13, T16, T19) about the sub theme of "welfare" are given. *"European Union means more liberal, more prosperous and more democratic society."* explained Teacher-2 (T2). *"European Union means having a high quality of life, in my opinion. EU citizenship means living well"* said T4. *"A person who is liberal, knows his/her rights, gives importance to production and consumption, is more tactful, more tolerant, rich, conformist and a bit arrogant, looks up other people (except USA) from the point of wealth and liberty, makes judgment about these people in this context*

and thinks to exploit these people and many countries." expressed T11.

Some of the thoughts of the teachers (T3, T5, T6, T12, T14, T15, T17, T18, T24) about the sub theme of "interest group" are below. *"European Union and its citizenship is European states' living concertedly toward mutual interests from the points of notably politics, economy, culture, religion and transportation."* told T5. *"European Union is a community which people of the same religion and similar races founded for their mutual interests. This union was founded for economical, political and cultural privileges and superiorities of these people. European Union citizenship symbolizes the privilege these people want to have around the world under this roof. It means having an unmerited prestige and privilege through EU citizenship."* explained T15. *"It means living in the states that are economically interdependent and being a part of society which is materialist and depends on working, producing and consuming."* said T24.

The answers of the preservice teachers (PT1, PT3, PT4, PT5, PT9, PT11, PT15, PT19, PT23, PT24, PT27, PT29, PT32, PT33) under the sub theme of "welfare" were randomly chosen and given below. *"European Union and its citizenship mean an occidental life. It absolutely has negative and positive sides. It is a kind of society which has freedom of thought and a prosperous life, treasures human but looks out for itself."* stated Preservice Teacher-9 (PT9). *"It means having a more modern life style, providing a democratic life, being liberal and developed, including multi-culture and prioritizing equality and justice."* expressed PT23. *"It is a developed citizenship which gives importance to human rights, democracy and rule of law and doesn't discriminate people according to their society, politics and ethnicity."* said PT33.

Some of the views of preservice teachers (PT1, PT2, PT8, PT9, PT10, PT13, PT14, PT15, PT16, PT18, PT21, PT22, PT25, PT28) on the sub theme of "interest group" are given. In this context, *"It means nothing. Because this system called European Union is both capitalist and self-righteous against other nations. Although its aim was initially seen as maintaining peace among European states, this union was abused by being deviated from its aim."* stated PT2. *"European Union is a constitution which looks after the interests of member states. Its citizenship provides great convenience like visa-free travel among these states."* expressed PT10. "In my opinion, EU is an association of European states for their economic interests, that is, a sort of commercial treaty. The point they regard is interests." explained PT13.

Findings within the Main Theme of "The Thoughts of Primary School Teachers and Preservice Primary Teachers about the View of EU States on Turkey and Its People"

The data of the second main theme was collected and analyzed by asking primary school teachers and preservice primary teachers "Do you think how European Union states and citizens see Turkey and its people? Please explain.". After analyzing, the range of the views under 9 sub themes is given in Table 2.

Table 2. The thoughts of EU states about Turkey and its people according to primary school teachers and preservice primary teachers

Theme	Sub Themes	Teacher		Preservice Teacher	
		f	%	f	%
The thoughts of EU states about Turkey and its people	**Reactionist**	5	20	2	6.06
	Muslim/An opposing religion or culture	9	36	12	36.36
	Inconvenience	1	4	2	6.06
	Underdeveloped/ Poor for EU	10	40	16	48.48
	Enemy/Threat	7	28	9	27.27
	Interest	4	16	3	9.09
	Disrespectful against human rights and democracy	4	16	6	18.18
	Undisciplined/Lawless	2	8	0	0
	No idea	1	4	2	6.06

In Table 2, the thoughts of primary school teachers and preservice primary teachers about the view of EU states and citizens on Turkey and its people were shown. As seen, primary school teachers thought that the view of EU states on Turkey and its people was at most seen as "underdeveloped/poor for EU" with the rate of 40%, "Muslim/An opposing religion or culture" with the rate of 36% and "enemy/threat" with the rate of 28%. This range is the same for preservice teachers. They chose "underdeveloped/poor for EU" with the rate of 48.48%, "Muslim/An opposing religion or culture" with the rate of 36.36% and "enemy/threat" with the rate of 27.27% at most. In this context, primary school teachers chose "inconvenience" with 4% and "undisciplined/lawless" with 8% at the least. 4% of teachers expressed that they had "no idea". None of preservice teachers chose the sub theme of "undisciplined/lawless". Preservice teachers chose the sub theme of "inconvenience" at the least. 6.06% of them also said that they had "no idea".

Some of the thoughts of teachers (T1, T2, T5, T6, T8, T10, T13, T16, T19, T21) are randomly given. *"I think that they see us as second-class people and society."* said T1. *"Like other societies, EU and its citizens think that science is very developed in west and eastern countries are underdeveloped from the point of education, health, society and culture; based on this, including many culturally and socially different nations, Turkey is seen as inequable and poor for EU."* stated T5. *"They think that we more uncivilized and underdeveloped than them."* said T16.

Some of the views of preservice teachers (PT2, PT4, PT5, PT9, PT11, PT13, PT15, PT17, PT19, PT20, PT23, PT25, PT26, PT27, PT29, PT31) about the sub theme of "underdeveloped/poor for EU" are stated. *"Turkey is a puppet in the eyes of European states. They can easily use Turkey in internal and foreign policy. They also won't want Turkey as a member in EU. In which country is there police murders, corruption and constitutional disruption? World media sees and think about these things. EU citizens also don't want Turkey as a member in EU."* told PT4. *"They see Turkey and its people less developed. They think that so. Because Turkey is a developing country in many aspects."* expressed PT11. *"Turkish people and society are not liked. They are seen as less developed than EU states."* explained PT29.

Findings within the Main Theme of "The Thoughts of Primary School Teachers and Preservice Primary Teachers about EU States in terms of Politics, Society, Economy, Culture, Respect for Human Rights and Democracy"

The data of the third sub theme was collected and analyzed by asking primary school teachers and preservice primary teachers "What do you think of European Union states in terms of politics, society, economy, culture, respect for human rights and democracy? Please explain.". After analyzing, the range of the thoughts under 7 sub themes is shown in Table 3.

Table 3. The Thoughts of Primary School Teachers and Preservice Primary Teachers about EU States in terms of Politics, Society, Economy, Culture, Respect for Human Rights and Democracy

Theme	Sub Themes	Teacher		Preservice Teacher	
		f	%	f	%
The Thoughts about EU States in terms of Politics, Society, Economy, Culture, Respect for Human Rights and Democracy	Developed	8	32	24	72.72
	Underdeveloped	4	16	3	9.09
	Different for each state	2	8	3	9.09
	Looking out for itself	13	52	10	30.30
	Socially and culturally collapsing	5	20	4	12.12
	Brutal capitalist	2	8	0	0
	Unsure/No idea	5	20	1	3.03

In Table 3, the thoughts of primary school teachers and preservice primary teachers about EU states in terms of politics, society, economy, culture, respect for human rights and democracy were given. According to this, primary school teachers saw EU as "looking out for itself" with the rate of 52% and "developed" with the rate of 32%. Primary school teachers mostly chose the sub theme of "developed" with 72.72% and "looking out for itself" with the rate of 30.30 while expressing their thoughts about EU. While primary school teachers chose the sub themes of "different for each state" and "brutal capitalist" with the rate of 2% at the least, preservice primary teachers chose the sub themes of "underdeveloped" and "different for each state". None of the preservice teachers expressed their idea about the sub theme of "brutal capitalist". Also, 20% of the teachers and 3.03% of the preservice teachers said that they were "unsure" or had "no idea".

Some of the thoughts of teachers (T6, T9, T11, T13, T14, T15, T18, T20, T21, T22, T23, T24, T25) about the sub theme of "looking out for itself" are shown. *"European Union states are a law unto themselves. I don't agree that they respect for human rights."* implied T6. *"European Union is economically in good condition. They have high living standards. It only looks out for its citizens in terms of human rights and democracy."* mentioned T13. *"They are very democratic if it suits their book. They are selfish. They lack of moral value."* said T20.

Some of the view of preservice teachers (PT1, PT2, PT3, PT4, PT5, PT6, PT8, PT9, PT11, PT12, PT14, PT15, PT16, PT17, PT19, PT20, PT22, PT25, PT26, PT28, PT29, PT30, PT31, PT33) on the sub theme of "developed are given. In this context, *"European people are more*

developed than our country in terms of respect for human rights and democracy. They respect individuals and their rights." explained PT3. *"These concepts correspond with these states and their citizens. They are developed in all aspects. They rate people because of being human in these countries. This thought cause the other developments."* said PT20. *"They are prosperous, developed and prim."* told PT33.

Findings within the Main Theme of "The Thoughts of Primary School Teachers and Preservice Primary Teachers about the Necessity of Turkey's Full Membership in EU"

The data of the forth main theme was collected and analyzed by asking primary school teachers and preservice primary teachers "Do you think should Turkey be a full member in European Union? Why?". After analyzing, the range of the thoughts under 6 sub themes is given in Table 4.

Table 4. The thoughts of primary school teachers and preservice primary teachers about the necessity of Turkey's full membership in EU

Theme	Sub Themes	Teacher		Preservice Teacher	
		f	%	f	%
The necessity of Turkey's full membership in EU	Advantageous	10	40	20	60.60
	Unnecessary	6	24	5	15.15
	Disadvantage	12	48	14	42.42
	Lost its old significance	2	8	0	0
	They need us	3	12	0	0
	Unsure/No idea	3	12	4	12.12

In Table 4, the thoughts of primary school teachers and preservice primary teachers about the necessity of Turkey's full membership in EU were given. Within this scope, primary school teachers mostly expressed their opinions about the necessity of Turkey's full membership in EU under the sub themes of "disadvantage" with the rate of 48% and "advantageous" with 40%. Preservice primary teachers expressed their opinions under the sub themes of "advantageous" with the rate of 60.60% and "disadvantage" with the rate of 42.42%. While the sub themes chosen by primary school teachers at the least were "lost its old significance" with the rate of 8% and "they need us" with 12%, none of the preservice primary teachers chose these sub themes. Besides, 12% of primary school teachers and 12.12% of preservice primary teachers expressed that they were "unsure" or had "no idea".

Some of the answers of teachers (T3, T6, T7, T10, T14, T15, T16, T17, T18, T19, T21, T24) under the sub theme of "disadvantage" are shown. According to this, *"I find it advantageous because of providing a life style in compliance with European standards. But I find it disadvantageous due to the fact that we will compensate our values and change our culture."* explained T3. *"I think Turkey's full membership in EU has more harm than good. Turkey can develop much more without this membership. They want many compromises and enforcements before membership. This is very disadvantageous for us. If we develop more and have a strong economy, they will try to make us their member. Otherwise, we may be supposed to give Cyprus or make law about same-sex marriage."* said T15. *"I think we shouldn't be member. We can come across with the same cultural degeneration."* told T24.

Some of the thoughts of preservice teachers (PT1, PT2, PT3, PT4, PT5, PT6, PT8, PT9, PT11, PT12, PT14, PT15, PT16, PT17, PT19, PT20, PT22, PT25, PT26, PT28, PT29, PT30,

PT31, PT33) under the sub theme of "advantageous" are shown. In this context, *"Full membership in EU will absolutely be very advantageous for Turkey. Turkey will develop from the points of politics, society, economy and human rights. There are some disadvantages of membership beyond advantages. It may cause some familial, more generally cultural degeneration."* expressed PT8. *"It has good and bad sides. Good sides: Every people will have the same rights. Bad sides: We will capitulate about our national and religious values."* mentioned PT19. *"Turkey's full membership in EU will be an advantage for Turkey's being decisive in world politics. Also, adopting EU frameworks throughout Turkey will make a contribution to development in the education, health and economy. But, Turkey's being full member in EU may cause some degeneration in Turkey's traditions and language."* stated PT28.

Findings within the Main Theme of "The Thoughts of Primary School Teachers and Preservice Primary Teachers about the Probability of Turkey's Full Membership in EU"

The data of the fifth main theme was collected and analyzed by asking primary school teachers and preservice primary teachers "What do you think about the probability of Turkey's full membership in European Union? Why?". After analyzing, the views under 8 sub themes are given in Table 5.

Table 5. The thoughts of primary school teachers and preservice primary teachers about the probability of Turkey's full membership in EU

Theme	Sub Themes	Teacher		Preservice Teacher	
		f	%	f	%
The thoughts of primary school teachers and preservice primary teachers about the probability of Turkey's full membership in EU	**Delayed**	8	32	7	21.21
	Can't be member	10	40	4	12.12
	Turkey withdraws	3	12	0	0
	Possible by fulfilling the conditions	2	8	6	18.18
	Minimal chance	4	16	4	12.12
	EU accept when it needs	2	8	4	12.12
	EU don't want Turkey	4	16	9	27.27
	Unsure	4	16	3	9.09

In Table 5, the views of primary school teachers and preservice primary teachers about the probability of Turkey's full membership in EU were given. In this context, while primary school teachers mostly expressed their opinion under the sub themes of "can't be member" with the rate of 40% and "delayed" with 32%, preservice primary teachers expressed their views under the sub themes of "EU don't want Turkey with the rate of 27% and "delayed" with 21.21 at most. Within this scope, the least chosen sub themes by primary school teachers were "possible by fulfilling the conditions" and "EU accept when it needs" with the rate of 8%, preservice primary teachers expressed their opinions under the sub themes of "can't be member", "minimal chance" and "EU accept when it needs" with the rate of 12.12%. None of the preservice teachers expressed their views under the sub theme of "Turkey withdraws". Also 16% of teachers and 9.09% of preservice teachers stated that they were "unsure".

Some of the answers of teachers (T1, T6, T13, T15, T17, T20, T22, T23, T24, T25) under the sub theme of "can't be member" are given. *"I think that Turkey's full membership in EU is impossible. Because, Turkey is significantly underdeveloped in terms of economy, society and human rights and EU states don't want Turkey as a member of EU. For example, Greece."*

explained T1. *"In my opinion, Turkey will not have a chance of being full member in EU, they don't accept. Because, EU practices double standards. They will find pretexts and difficulties. They told us to give Cyprus, found a Kurdish state and make concessions to Kurds, etc."* said T15. *"They don't accept Turkey as a member in EU. Because we are Muslims."* expressed T24.

Some of the views of preservice teachers (PT3, PT5, PT7, PT10, PT17, PT20, PT25, PT29, PT32) under the sub theme of "EU don't want Turkey" are shown below. In this context, *"I think that they won't accept Turkey as a full member in EU. They don't want a Muslim country in Christian association. Or they make an effort until they change us."* told PT7. "Republic of Turkey is the continuation of Ottomans. They proselytized Islam throughout the three continents. We defeated them in Balkan Wars and Crusades. All of the Christians are filled with the hate of Islam and Turks. They will never accept us and we had better give it up." stated PT10. *"Turkey is a country including 70 million people. I don't expect that EU will accept Turkey as a full member. Because, if there is visa-free travel, this population will immigrate Europe. This will not be welcomed by EU states. I think, Turkey shouldn't be a member of EU. It should found "Turan Union" with Turkic states in the Middle East."* expressed PT32.

Conclusion and Discussion

The results found after examining the views of primary school teachers and preservice primary teachers on EU and EU citizenship are given below by being discussed.

1. Primary school teachers and preservice primary teachers think that EU is an association that was founded by the states looking out for their interests and EU citizens are the people who behave according to this. Also, they express that EU and EU citizens are prosperous.

That primary school teachers and preservice primary teachers mostly pointed out welfare level has parallels with the other researches (Alkan, 2013; Altunay, 2012; Dinç, 2009; Eurobarometer 74, 2010; The German Marshall Fund of the United States, 2011). But, in this regard, the interesting point is the views that EU is an interest group and EU citizens just only look out for themselves. According to Ortaylı (2008), the political unity between the EU states, which were at war for ages, is not only a situation after the foundation of EU, but also there had been before. European states didn't only found a unity after Second World War; but they had founded same unities in spite of being at hundreds of wars throughout history. Therefore, just as there were European states, which initially made war against each other and then they founded unities but finally broke it; the permanence of the current unity may not be guaranteed. These unsteady unities between European countries may cause the result that primary school teachers and preservice primary teachers think that EU and its citizens are interest groups looking out for themselves.

2. Primary school teachers and preservice primary teachers think that EU and its citizens see Turkey and its people as poor and underdeveloped for being a member of EU, carrying an opposing culture and religion and an enemy or a threat. But some researches in the literature show a bit different results from this study. In the study by The German Marshall Fund of the United States (2011), EU states indicated that Turkey has an adequate economy to be a member of EU; besides, Turkey's membership in EU will make a great contribution to the economy of EU and even become effective to maintain peace in the Middle East. However, it can be seen that EU states have a prejudice against Turkey. In a study by Boğaziçi University European Studies Research Center (2009), it was determined that EU citizens pointed out

cultural criteria rather than political and economical criteria while expressing their opinions about Turkey. According to this, most of the negative thoughts of EU citizens about Turkey were composed of cultural factors with the rate of 45.6%; while political factors had a rate of 29.7% and economical factors had 20.7%. In this context, the thoughts of primary school teachers and preservice primary teachers are in accord with the reality in terms of religious and cultural aspects but irrelevant with the reality from the point of economy and politics.

3. Primary school teachers think that EU states look out for themselves in terms of politics, society, economy, culture, respect for human rights and democracy. There are relevant interpretations above about looking out for themselves in terms of politics, society and economy. But from the point of respect for human rights and democracy, an analysis can't be properly done whether EU institutionally looks out for its interests in this regard, or not. However, the national behaviors of EU states may cause some thoughts in this point. For instance, France's deporting Gypsies, double standards examples of France against Muslims and repressive approaches of some European governments against Muslims show that EU dissembles especially about human rights and democracy. For this reason, primary school teacher may think that EU looks out its interests in terms of politics, society, economy, culture, respect for human rights and democracy.

That preservice primary teachers see EU as developed in terms of politics, society, economy, culture, respect for human rights and democracy may derive from the fact that recently EU is tried to be shown as if it undertakes both regional and global missions and it is a developed constitution. For example, because of winning Nobel Peace Prize in 2012 (The Nobel Foundation, 2014), trying to be held a mediatory position in Ukraine crisis in 2014, finding Turkey unjust about human rights and democracy in European Court of Human Rights and due to the fact that these event have a broad repercussion in press and social media, EU may be seen as developed by preservice primary teachers, who follow the internet and social media much more efficiently.

4. While primary school teachers think that full membership of Turkey in EU will do more harm than good, preservice primary teachers think vice versa. In fact, when the answers of both groups are analyzed, it can be obviously seen that most of both teachers and preservice teachers see it both an advantage and a disadvantage. As the related researches are analyzed, The German Marshall Fund of the United States (2011) determined that the attitude of Turkish citizens about EU was positive with the rate of 48% in 2011. But, it was stated that this attitude was at the rate of 73% in 2004 and it generally showed a falling tendency until 2011. According to the report of Eurobarometer 74 (2010), it was seen that in 2010, 42% of Turkish people thought that full membership of Turkey in EU would be positive. In the same research, it was found that the rate of the people thinking negative was 32%. When the data of the researches in 2004 and 2010 are compared, it is clear that the rate of the ones thinking positive showed a falling tendency from 71% to 48%, while the rate of the ones thinking negative showed an upward tendency from 9% to 32%. The common result in two researches is that the number of Turkish people thinking positive about EU is almost the same with the number of the ones thinking negative. As seen, in this research, teachers and preservice teachers explain their opinions in this direction.

5. While primary school teachers express that Turkey will not be a member of EU because of political, social, economical, cultural and religious reasons, preservice primary teachers indicate that Turkey will not be a member of EU because of the prejudice of EU against Turkey.

The answer of teachers and preservice teachers show that although the views of both groups about the future of Turkey membership in EU differ from each other, basically the common idea of them is that Turkey won't be a full member of EU under no circumstances. While teachers say that Turkey will meet some internal and foreign obstacles in the process of EU membership, in addition to this, preservice teachers especially imply that EU won't accept Turkey as a full member. Beside the obstacles derived from EU, teachers also tell that Turkey will not fulfil the required criteria for being a full member. But, preservice teachers express that EU will not accept Turkey as a full member in no way. In this regard, both groups mostly indicate cultural and religious reasons. Thus, that lots of states, which are more underdeveloped than Turkey in many points, were admitted to full membership in EU and Turkey has been delayed because of some excuses may cause that generally Turkish people and especially teachers and preservice teachers think that Turkey will not be a full member of EU.

In the study, researching the views of EU states on the full membership of Turkey, by Akşit, Şenyuva and Üstün (2009), it is seen that these states cannot reach a consensus in this regard. On the one hand there are countries leaning towards the full membership of Turkey like Spain and supporting it in certain circumstances like Romania, Bulgaria and Sweden; on the other hand there are countries which are in opposition to Turkey's full membership on all occasions like France, Australia, Greece and South Cyprus and which express both positive and negative opinions in this context like Italy. Also, the membership of Turkey is not a popular agenda and don't call public's attention in some countries like Check Republic, Poland and Belgium. Briefly, it can't be right to say that there is a consensus in EU states about the full membership of Turkey. However, the reasons of the ones who don't support it are mostly based on cultural, religious and historical facts. For the full membership of Turkey, the number of the states which regard human rights and democracy, which EU primarily stipulates for membership, is very few comparing with the number of the other group.

Suggestions

In consideration of the discussions and the results of the research, these may be suggested to contribute to develop a right point of view about EU and EU citizenship:

1. Conferences, panels and symposiums reflecting an official point of view on the process of full membership in EU, its advantages and disadvantages may be used to raise the consciousness of primary school teachers and preservice primary teachers about EU and EU citizenship.

2. The activities by which teachers and preservice teachers can observe EU states, their life styles, and cultures on the spot may be featured.

3. In the curriculum of primary and high schools, there may be the contents and activities which aim to introduce the EU policy of Turkey and socio-cultural aspects of EU states. Also it can be suggested that there may be courses including the information about the EU policy and membership process of Turkey in the curriculum of faculties of education.

4. The personal and institutional interactions between Turkey and EU states can be increased by popularizing the student and teacher exchange programs within EU.

5. This research was applied to primary school teachers and preservice primary teachers. Similar researches in the same context may be applied to teachers in elementary and high

schools, preservice teachers who will probably work in these grades and instructors in universities.

Acknowledgement

References

Akşit, S., Şenyuva, Ö. & Üstün, Ç. (2009). The view of European Union states on the membership of Turkey [Avrupa Birliği ülkelerinden Türkiye'nin üyeliğine bakış]. METU Center for European Studies, Ankara.

Alkan, M. N. (2013). European Union perception of university students in Turkey [Türkiye'deki üniversite öğrencilerinin Avrupa Birliği algısı]. Konrad-Adenauer-Stiftung, Ankara, Turkey.

Altunay, E. (2012). Investigation of predictor variables of European Union identity in education institutions. Unpublished dissertation. Ege University Social Sciences Institute, İzmir, Turkey.

Başbay, A. & Doğan, N. (2004). Conceptions of teachers related to effect of European Union membership adaptation process on our education system. *Ege Educational Journal [Ege Eğitim Dergisi]*, 5(2), 35-52.

Boğaziçi University European Studies Research Center (2009). The view of Europeans on Turkey as a prospective member of Europe and Europeanization problems of Turkey [Avrupalıların Müstakbel Bir Avrupa Üyesi Olarak Türkiye'ye Bakışları ve Türkiye'nin Avrupalılaşma Sorunları]. http://hakanyilmaz.info/yahoo_site_admin/assets/docs/BUCES-AID-UAM-OpinionPoll-Sunus-Turkce-v03.356161957.pdf (Access: 04.05.2014).

Çubukçu, Z. & Gültekin, M. (2006). Social skills that need to be gained by primary school students. *Journal of Social Sciences of the Turkish World [Bilig Türk Dünyası Sosyal Bilimler Dergisi],* 37: 155-174.

Dinç, E. (2009). The view of preservice teachers on Europe and European citizenship. *I. International European Union, Democracy, Citizenship and Citizenship Education Symposium*, Uşak University European Union Education Application and Research Center: 201-207.

Doğan, İ. (2012). Educational sociology [Eğitim sosyolojisi]. Ankara: Nobel Publishing.

Erden, M. (2007). Introduction to educational sciences [Eğitim bilimlerine giriş]. Ankara: Arkadaş Press.

Erginer, A. (2006). European Union education systems [Avrupa birliği eğitim sistemleri]. Ankara: Pegem Akademi Publishing.

Eurobarometer 74 (2010). Public opinion in the European Union: Turkey. http://ec.europa.eu/public_opinion/archives/eb/eb74/eb74_tr_tr_nat.pdf (Access: 07.05.2014).

Güven, S. & Şahin, İ.F. (2003). Qualities and the problems of teachers of citizenship and human rights course: Erzincan city sample. *Eastern Geographical Review [Doğu Coğrafya Dergisi]*, 8(10): 213-226.

İbrahimoğlu, Z. (2009). Active citizenship definitions of preservice primary teachers and the role providing social studies course to raise active citizen. *I. International European Union, Democracy, Citizenship and Citizenship Education Symposium*, Uşak

University European Union Education Application and Research Center: 437-443.

İnaç, H. (2005). Identity problems of Turkey during the European Union integration process [AB'ye entegrasyon sürecinde Türkiye'nin kimlik problemleri]. Ankara: Adres Publishing,

Karaman-Kepenekçi, Y. (2008). Human rights and citizenship for educators [Eğitimciler için insan hakları ve vatandaşlık]. Ankara: Ekinoks Press.

Kaya, A. (2013). European Union citizenship. (Editor: A. Kaya et al). *Introduction to European Union: History, institutions, policies [Avrupa Birliği'ne giriş: Tarih, kurumlar, politikalar]* (p.133-148). İstanbul: İstanbul Bilgi University Publishing.

Kırşehir National Education Directorate (2014). 2012-2013 *Academic Year National Education Statistics*, http://kirsehir.meb.gov.tr/arge/upl/dokumanlar/haber/istatistik2013/index.html (Access: 07.04.2014).

Ortaylı, İ. (2008). Europe and us [Avrupa ve biz]. İstanbul: Turkey İş Bank Culture Publications.

Özuğurlu, M. B. (2009). Perception of university students about European Union and European citizenship concepts [Üniversite gençliğinin Avrupa Birliği'ni ve Avrupa vatandaşlığı fikrini algılaması]. *I. International European Union, Democracy, Citizenship and Citizenship Education Symposium*, Uşak University European Union Education Application and Research Center: 320-324.

Potter, J. (2002). The challenge of education for active citizenship. *Education and Training*, 44(2), 57-66.

Sağlam, H. İ. (2012). An investigation on primary school teachers' perceptions of effective citizenship proficiency by certain variables. *Journal of Social Studies Education Research,* 3(2): 71-85.

Standard Eurobarometer 77 (Spring, 2012). TNS Opinion & Social http://ec.europa.eu/public_opinion/archives/eb/eb77/eb77_value_en.pdf

Tezcan, M. (2012). Educational sociology [Eğitim sosyolojisi]. Ankara: Anı Publishing.

The German Marshall Fund of United States. (2011). *Transatlantic trends 11*. http://www.gmfus.org/archives/transatlantic-trends-2011/ (Access: 06.05.2014).

The Nobel Foundation (2014). The Nobel Peace Prize 2012. http://www.nobelprize.org/nobel_prizes/peace/laureates/2012/ (Access: 18.05.2014).

Yeşil, R. (2002). Human rights and democracy education in school and family [Okul ve ailede insan hakları ve demokrasi eğitimi]. Ankara: Nobel Press.

The influence of academic achievement in pupils' academic self-concept construction during the transition to lower secondary education

Pranvera Kraja[*]

Faculty of Educational Science, University of Shkodra, Albania.

The purpose of this study was to assess pupils' academic self-concept before and after the transition to lower secondary education (LSE) and showing changes in this indicator during this period. To assess pupils' academic self-concept in Albanian language and Math were combined data from three different sources: children's self-beliefs about their capabilities, the grades received in the two main subjects during the two study periods, and the third source was pupils competency assessment by teachers of the respective subjects. As a survey instrument it was used that of Gniewosz et al. (2011). The study aims to answer these research questions: How does pupils' academic self-concept change when they pass to LSE? Do achievements in Albanian language and Math influence pupils' self-concept? What role do teachers' perceptions play in the construction of pupils' self-concept abilities? Questionnaires of pupils and teachers were filled through self-reporting. Measurements were conducted twice: at the end of fifth grade and at the end of first semester of the sixth grade. Results of the study will be referred to the theoretical framework of reference and differential of information 'sources for student self-concept construction. Tests showed that there was high correlation between verbal and mathematical achievement. Correlations between language grades and Language self-concept were strong and positive, while in Math this relation was low. The relations between grades and self-concept in Language before and after the transition, were more influenced by teachers' perceptions, while in Math this effect was not significant. Pupils' self-concept in Math were not affected neither by grades nor by teachers' perceptions, suggesting that learners may have used other sources of information for their self-concept construction. Sixth grade teachers showed less confidence in the abilities of pupils than teachers of fifth grade.

[*] Address for correspondence: v.kraja@yahoo.com

Introduction

The study objective was to assess pupils' academic self-concept in the transition from primary to lower secondary education (LSE). The main purpose was to study the changes of academic self-concept in two main subjects: in Albanian language and Math. The choice of these two main subjects was done because these are subjects where children show their verbal and mathematical skills, which are the bases of skills for other school subjects.

For the measurement and construction of students' academic self-concept, researchers estimate as valuable sources: the grades in respective subjects, internal and external comparisons that students do by himself, and appraising opinion of other persons such as teachers, parents and peers (Gniewosz, Eccles, & Noack, 2011). In this study, to measure academic self-concept in transition, there were used three different sources: academic self-concept that pupils had about themselves; assessment of the pupils' competence from the respective subjects teachers, and students grades in Albanian language and Math in two study development periods. Results of the study will be explained and compared with the theoretical framework of reference and with different sources of information that students use to construct their academic self-concept.

Academic self-concept and school transition

What place occupies the academic self-concept in general self-concept? Self-concept is known as a complex network of self-perceptions that a person creates about his beliefs to the adoption of certain behaviors and some personal attributes with cultural value (Gresham, Eliot, & Evans-Fernandez, 1993, cited in Christensen, 2007, p. 11). Or, self-concept is related to the individual's beliefs and estimations about characteristics, roles, skills and his relationships (Wigfield, Lutz, & Wagner, 2005, p. 113). While academic self-concept can be explained as "a point of view, feelings and perceptions of a person about specific intellectual or academic skills, that represent a person's self-beliefs and feelings about an academic environment" (Lent, Brown, & Gore, 1997, p. 308). Other researchers conceptualize academic self-concept as a viewer of his or her academic ability in comparison with other students (Cokley, 2000, cited in Bacon, 2011, p. 7).

Theoretical frame of reference actually includes both of these definitions. According to Marsh (1986) and Marsh, Byrne, & Shavelson, (1988) students construct their academic self-concept making both internal and external comparisons relating to their academic performance. Students compare their academic achievements in all subjects (it has to do with what is called internal comparison) and their overall abilities in relation to others (peers) within their environment of learning (these constitute external comparisons) (cited in Williams & Montgomery, 1994, p. 5).

From school experience and scientific literature, many balances break down when students move from one school cycle to another. This phase called "transitional school" can be very stressful for many children (McGee, Ward, Gibbons, & Harlow 2004). An important indicator of this stress, have been the declines of academic achievement that students have had in elementary school. Potential influences on students' academic self-beliefs are particularly important during the middle school years, as the transition from elementary to middle/junior high school often introduces a larger social comparison group, a greater emphasis on grades and competition, and a larger, less personal environment (Eccles, Wigfield, Flanagan, Miller, Reuman, & Yee, 1989; Harter, Whitesell, & Kowalski, 1992; cited in Britner & Pajares, 2006, p. 489). Strong academic

difficulties that may be experienced by students, can lead to low self-concept and the consequences can be negative (Elbaum & Vaughn, 2001; cited in Christensen, 2007).

For measuring the students' academic self-concept, the majority of studies report changes in academic self-concept in two main school subjects: in Language and Math. Results of these studies were clear and had a common trend by emphasizing the decline in the academic self-concept and what they think about their abilities, immediately after the transition to the next school cycle (Alspaugh, 1998; Wigfield & Eccles 2000).

Method

This study was intended to assess pupils' academic self-concept before and after the transition to lower secondary education (LSE) and showing changes in this indicator during this period. The study aims to answer these research questions: How does pupils' academic self-concept change when they pass in LSE? Do the achievements in Albanian language and Math influence pupils' self-concept in these subjects? What role do teachers' perceptions play in the formation of pupils' self-concept abilities?

According to the academic self-concept theory, except children' beliefs about their competence and skills in school subjects, a powerful source of information are also grades and evaluation of others as parents, teachers or peers.

In the current study there were used three different sources for measuring the academic self-concept in the transition process: (1) academic self-concept that students had about themselves; (2) the perception of teachers about student abilities and (3) pupils' grades in two main subjects in both study development periods. Data analysis was performed with SPSS statistical package for social sciences.

Starting from scientific literature approaches, our expectations from this study were that after the transition of pupils in the sixth grade (in LSE), their academic performance would be lower. Grades after school transition would predict significant changes in pupils' self-concept abilities for the two school subjects and will constitute a lower self-concept than they had before the transition. Another expectation of the study was that teachers' perception about children competences will have impact on grades and pupils' self-concept.

Sample

In Albania, school transition from elementary school students in LSE, is made from grade five to grade six, so the study population were fifth grade pupils who passed to six.[1] In the study participated 75 pupils from three schools of Shkodra city. Percentage of participants in the two measurements was 49% boys, 51% girls. In the study also participated the Albanian Language and Maths teachers of the fifth and sixth grade.

---

[1] A difference of the Albanian schools structure with some of the Europe, America or Australia countries, stays in the fact that the transition between elementary school and LSE, is done in the same building with the elementary school, so children do not change school, as happen in many other countries. The exceptions are the cases when families move from one place to another, or parents with their desire change the child' school for the best education toward public or private schools.

Research instrument

As a research instrument it was used that one of Gniewosz, Eccles and Noack (2011) to measure beliefs about students' abilities. It is a self-reporting questionnaire, which seeks to assess students' self-concept in two main areas: verbal and mathematical achievements. Both measurements were conducted by the same group of pupils. The first measurement was conducted at the end of fifth grade in June 2013 and the second one was the end of first semester of sixth grade, in February 2014.

Based on the theoretical frame of reference on the formation of the academic self-concept (Marsh, 1986; Marsh, Bryne & Shavelson 1988), the questions intended to measure both internal as well as the external academic self-concept.

In the study participated the same number of pupils in the two periods of its development, who answered all questions (there was no missing response). The student questionnaire contained a total of eight questions, four for each academic area, two of which assessed the internal self-concept and two questions the external self-concept evaluation. For example, for Maths there were asked the following questions: 'How good at Maths are you?' (with seven response Likert scale: 1- 'not at all good' to 7- 'very good'), 'If you were to rank all the students in your math class from the worst to the best in math, where would you put yourself'? (1- 'the worst' to 7- 'the best'), 'In general, how hard is Maths for you'? (1-'very easy' to 7- 'very hard'), and 'Compared to most other school subjects you have taken or are taking, how hard is maths for you'? (1- 'my easiest' to 7- 'my hardest course') (Gniewosz, Eccles and Noack,2011, p.6). The same questions were asked for the Albanian Language subject. The whole instrument used had the coefficient of reliability $\alpha = .91$, while Cronbach's alpha of the pupils questionaries had these weightings reliability: English Language T1: $\alpha = .94$, T2 = .94; Maths T1: $\alpha = .94$, T2: $\alpha = .96$. (where T1 = The end of fifth grade, T2 = The first semester of sixth grade).

While for evaluating pupils' abilities by teachers in both academic fields and in both periods of measurement, a questionnaire was completed by Albanian Language and Math teachers of the fifth and sixth grade. Questions were also taken from the study of Gniewosz, Eccles and Noack (2011), which was used for students' mothers, but in this study the questions were modified to be used for teachers. The purpose of this questionaire was to measure teachers' perceptions about pupils competence. Teacher questionnaire contained two columns, in the first column the list of pupils names and to the next the following three questions: 'In general, I believe that (the name and surname of the pupil) is ... ' (response format: 1- 'not at all good at Maths' to 7- 'very good at Maths'), 'This pupil finds Maths ... ' (1- 'very easy' to 7 'very hard'), and 'How well is this pupil doing in Maths this year'? (1- 'not at all well' to 7- 'very well'). The same questions were also used for the Albanian Language subject. Cronbach's alpha of teacher questionnaire resulted negative ($\alpha = -.28$) due to the negative covariance between questions. To fix this, I recoded the second question of teachers: 'This pupil finds Maths ... ' (to reverse format responses: 1- 'very hard' to 7- 'very easy'), and reliability coefficients became positive. The Cronbach's alpha of teacher in Albanian Language T1: $\alpha = .97$, T2: $\alpha = .96$, in Maths T1: $\alpha = .98$, T2: $\alpha = .97$.

The third source for assessing academic self-concept in Albanian language and Maths, there were used pupils grades in these subjects, which were extracted from records of the respective classes.

Data analysis and results

Data analysis was done with SPSS statistical package, precisely with Repeated Measures Multivariate Analyses. The dependent variables were academic self-concept that pupils have about themselves and teachers' perception about pupils abilities.

The analysis involved academic competence changes in both main subjects (Albanian language and Maths) and the perception of teachers on both measurement periods. Academic issues and two measurement periods were analyzed as within subject factors. Mean and Standard Deviation of these variables are presented in Table 1.

Table 1: Mean dhe Standart Deviations

Vetë-koncepti i aftësive	Mean	Std. Deviation
SCA Lang5	4.50	1.19
SCA Lang6	4.08	.47
SCA Math5	3.98	.40
SCA Math6	4.09	.50
Teachers competence		
TPSC Lang5	5.00	1.69
TPSC Lang6	4.17	.56
TPSC Math5	4.42	.48
TPSC Math6	4.07	.49

SCA = self-concept of abilities, TPSC = Teacher Perceptions of Pupils Competence.
Lang5 = Language class 5, Math5 = Maths class 5.

As academic self-concept and the teachers' perception of pupils competence had decreased during T1 and T2, except to the mathematical self-concept of pupils. Multivariable tests showed decline between T1 and T2 (time 1 and time 2) in the following indications: in academic self-concept :F $(5, 70) = 7.14$, p = .000, $\eta^2 = .51$, and in teachers' perceptions of pupils competence: F $(1,74) = 9.79$, p = .003, $\eta^2 = .11$.

Relations between academic self-concept (SCA) and teachers' perception of pupils' self-concept (TPSC) were performed using Pearson correlation coefficient. Full correlation between all elements of the dependent variables was made in order to see the changes before and after transition (Table 2). There was correlation between academic self-concept in Math between T1 and T2: r = .31**; while in Languages the correlation was not significant: r = .04.

Perceptions that teachers had to pupils' self-concept presented strong correlations in Language, r = .59** and more in Math, r = .63**. Correlations between self-concept subjects and relevant grades were stronger in T1 than in T2: SCA Lang5 - Grade Lang5: r = .57**, SCA Lang6 - Grade Lang6: r = .26*. In Math T1: r = .25*, Math T2: r = .11 (not significant).

Grades between subjects had strong correlations: Language T1: r = .92**, T2: r = .85**. In the same way as grades between Languages and Maths as well as grades between subjects and between Time1 and Time2, had strong correlations: Grade Grade Lang5 with Math6: r = .82**; Lang6 with Math5 Grade Grade: r = .90**.

Table 2: Correlation Matrix between grades, self-concept and teachers' perceptions

		1	2	3	4	5	6	7	8	9	10	11	12
1	Grade Lang5	1											
2	Grade Math5	.92**	1										
3	Grade Lang6	.91**	.90**	1									
4	Grade Math6	.82**	.81**	.85**	1								
5	SCA Lang5	.57**	.56**	.55**	.53**	1							
6	SCA Lang6	.22	.23*	.26*	.29**	.04	1						
7	SCA Math5	.25*	.25*	.18	.17	.24*	.02	1					
8	SCA Math6	.13	.10	.09	.11	-.02	-.11	.31**	1				
9	TPSC Lang5	.97**	.90**	.90**	.83**	.59**	.25*	.22	.11	1			
10	TPSC Math5	.75**	.85**	.76**	.66**	.45**	.20	.17	-.00	.74**	1		
11	TPSC Lang6	.85**	.86**	.94**	.81**	.52**	.26*	.17	.11	.86**	.74**	1	
12	TPSC Math6	.75**	.73**	.78**	.87**	.46**	.24*	.05	.07	.76**	.63**	.74**	1

Note: Table 4 presents the Pearson correlation coefficients (r). Grade Lang5 = grade Language class 5, Grade Math5 = grade Maths class 5, SCA Lang5 = self-concept of abilities in Language class 5, SCA Math5 = self-concept of abilities in Maths class 5, TPSC Lang5 = Teacher Perceptions of Pupils Competence in Language, class 5. TPSC Math5 = Teacher Perceptions of Pupils Competence in Maths, class 5.

** Correlation is significant at the .01 level (2-tailed).

* Correlation is significant at the .05 level (2-tailed).

Participatory Educational Research (PER)

The Regression analysis for issues within subjects showed that grades predicted significant changes in academic self-concept of pupils before and after the transition (Table 3). Languages T1: β = .57 **, T2: β = .24*, grades in Maths predicted no significant changes T1: β = .18, T2: β = .11.

Grades significantly predicted changes in pupils' self-concept for issues between subjects. So, Language grades predicted changes in Maths self-concept before transition: T1: β = .25** but after the transition the cofficient was not statistically significant: T2: β = .09. Maths grades predicted significant changes in Language self-concept: T1 = .55**, T2 = .27*.

Table 3: The standard coefficients of regression tests

	T1		T2	
	β	SE	β	SE
Grade Lang – SCA Lang	.57**	.07	.24*	.03
Grade Lang – SCA Maths	.25*	.06	.09	.04
Grade Maths – SCA Maths	.18	.03	.11	.04
Grade Maths – SCA Lang	.55	.07	.27*	.04
Grade Lang – TPSC Lang	.97**	.03	.85**	.02
Grade Lang – TPSC Maths	.85**	.02	.73**	.02
Grade Maths – TPSC Maths	.94**	.03	.87**	.02
Grade Maths – TPSC Lang	.90**	.05	.66**	.03
TPSC Lang – SCA Lang	.59**	.06	.26*	.09
TPSC Lang – SCA Maths	.23*	.02	-.009	.10
TPSC Maths – SCA Maths	.17	.09	.07	.12
TPSC Maths – SCA Lang	.53**	.24	.25*	.10

The table 3 shows the standardized regression coefficients (β). SE = Standard Error, T1 = The end of fifth grade, T2 = the first semester of sixth grade. Grade Lang = Grade Language, Maths = mathematics, SCA = Academic Self-Concept, TPSC = Teacher Perceptions of Pupils Competence.
*p <.05; **p <.01.

Grades also predicted strong changes to teachers' perceptions in Language: T1: β = .97**, T2: β = .85**. Maths: T1: β = .94**, T2: β = .87**. Teachers' perceptions predicted significant changes in pupils self-concept in Language: T1: β = .59**, T2: β = .26*, while in Maths although teachers' perception had not impact on Maths self-concept, again the coefficients decreased: T1: β = .17, T2: β = .07.

Between subjects issues, teachers' perception in Language predicted changes in Maths self-concept: T1 = .23*, after the transition this effect was negative and not significant: T2 = - .009. Better appear teachers' perceptions in Maths towards pupils' self-concept in Language: T1 = .53**, T2 = 25*. Despite the value of the coefficient β, from all regression tests presented in Table 3, all coefficients predicted decline after the transition.

Partial correlation was applied to explore the relation between grades and pupils' academic self-concept, while controlling for teachers perceptions on pupils competence. A low negative partial correlation was recorded between language grades and language self-concept (T1) mediated from perception of teachers, r = - .062, p = .000 with a high level of grades impact on the self-concept students. An inspection of zero correlation (r = .57) suggested that the perception of teachers had a very negative impact on the relation between grades and pupils' self-concept in pre-transition languages. Even in Language T2, grades and self-concept of pupils were influenced by teachers perception, r = .02 and zero correlation: r = .23.

While in Maths before and after the transition, teachers' perception did not affect the correlation between grades and pupils' self-concept. Maths T1: r = .05 and zero correlation: r = .18; Maths. T2: r = .10 and zero correlation: r = .11.

Partial correlation was not statistically significant in influencing teachers' perception on correlation between grades and intersubject's self-concept. So, teachers perception did not affect on the relations between Language grades and Maths self-concept, and did not affect in the relations between Maths grades and Language self-concept. This means that the correlation between them was clean and did not depend on any other mediator factor.

Univariant tests were developed through regression analysis to see first of all, the effect of grades on self-concept of children; secondly, the effect of grades in teachers' perception and thirdly, the effect of teachers' perceptions on pupils' self-concept in both subjects (Languages and Math). All regression coefficients had decreased. Only results of regression between Language self-concept T1 and teachers perception in Math T1 (p = .94), self-concept in Math T2 and teachers' perception in Math T2 (p = .55), self-concept in Math T2 and teachers' perception in Language T2 (p = .94), showed that correlations were not significant and the p-value was p > .05 for the three pairs of variables above.

Discussion

This study aimed to assess self-concept skills of pupils during the transition from primary to lower secondary education (AMU). The main purpose was to study the changes that undergoes self-concept of students' abilities in two main subjects: the Albanian language and Mathematics.

Results from this study confirmed the assumptions of some of the theoretical framework of reference of the Marsh (1990) and different sources of information for the construction of the academic self-concept. Results showed that self-concept of pupils' verbal abilities, teachers perception of pupils competence and grades in both subjects, had decreased after the transition.

Similar findings were reported from a study of Bacon (2011) for 101 African-American students who moved from urban schools to rural schools. The findings of this study proved strong transition effects in academic performance of students, in the variables of self-concept, and in academic achievement. Although not comparable to the size of the study population with the current study, Gniewosz, Eccles and Noack (2011) also found decline in self-concept abilities of students immediately after the transition to the LSE. Stronger declines in language skills, and much less in those mathematical resulted in the longitudinal study of Jacobs, et al. (2002), who studied changes in beliefs and values of children's competence in language arts, mathematics and in sports for students from grades 1-12.

This study showed that the correlations between academic self-concept in language and self-concept in math were low and negative (T2 = - .11) only after the transition, confirming the theory of reference under which this correlation should be low or zero (before transition this correlation was significant). This relation demonstrates that pupils have the necessity for internal and external comparisons for the construction of academic self-concept. Janice & Montgomery (1994) reported similar results from their study.

Based on theoretical model of Marsh (1990), the impact of verbal achievements on maths self-concept and mathematical achievements in verbal self-concept, it is assumed to be low and negative. From current study only impact of language grades in mathematical self-concept after the transition, came low and positive (β = .09), whereas the effect of mathematical achievements in verbal self-concept were high, contrary to the assumption of the theoretical model of Marsh.

Internal comparisons that pupils make for themselves, were strong. This became evident because of the high correlation between verbal achievement and math, and between verbal achievements in verbal self-concept. As for the impact of teachers perceptions on student abilities, Meaning (2007) states that teachers strongly influence the academic and social issues. (p. 12). Results of this study showed that perception of teachers affect students' self-concept in language before and after the transition, but in maths this impact was not significant.

Our expectations on the results of the study, were not all realized. Thus, the transition did not affect self-concept in mathematics. Despite the achievements in Maths were lower after the transition than before, self-concept of pupils' abilities in this subject, does not change much. This means that after the transition grades lose their value in the formation of self-concept of students mathematical abilities. Also, self-concept of pupils in maths was not affected neither by grades nor by teachers' perception. Resources that pupils used to build their self-concept in Maths were not the same as those used for verbal self-concept. Apparently, pupils have used other sources than grades and teachers perceptions on forming their self-concept in mathematics. Perhaps students may have used the perception of peers or parents as a source.

Limitations

Results of this study can not be generalized because of the small number of sample used and the limited number of schools involved. Although in this study were used three different sources to explain the construction of pupils academic self-concept, other sources must be taken into consideration, such as perception of peers or parents. This fact was confirmed by the construction of pupils self-concept in maths, which was not influenced by two main sources that

we took into consideration. Also, the limited number of measurements before and during the transition of children in lower secondary education, can not fully explain how the construction of self-concept continues. Other studies can be extended to a longer time segment including not only a key point of the transition.

Conclusions

Results from this study confirmed some assumptions of the theoretical framework of reference of Marsh (1990) and the use of different sources of information for the construction of their academic self-concept by pupils. In conclusion, the transition of pupils from primary to LSE, was negatively affecting their academic achievements, self-concept of children's abilities in the language, and teachers' perceptions on pupils abilities. Sixth grade teachers showed less confidence in the abilities of pupils than teachers of fifth grade. To build maths self-concept, pupils did not use informations' sources used for the construction of verbal self-concept.

References

Books
McGee, C., Ward, R., Gibbons, J. & Harlow, A. (2004). Transition to Secondary School: A Literature Review. University of Waikato. Hamilton. New Zealand.

Journal articles
Alspaugh, J. W. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research,* Vol. 92, No. 1, 20-25.
Available online at: http://www.idealibrary.com
Britner, L. Sh. & Pajares, F. (2006). Sources of Science Self-Efficacy Beliefs of Middle School Students. *Journal of Research in Science Teaching,* Vol. 43, No. 5, 485–499. Available on line at: http://www.Weizmann.Ac.Il/Weizsites/Blonder/Files/2011/02/Pajares.
Cokley, K. O. (2000). An investigation of academic self-concept and its relationship to academic achievement in African American college students. *Journal of Black Psychology*, Vol. 26, 148-164.
Eccles, J.S.,Wigfield, A., Flanagan, C.A., Miller, C., Reuman, D.A., & Yee, D. (1989). Self-concepts, domain values, and self-esteem: Relations and changes at early adolescence. *Journal of Personality,* Vol. 57, 283–310.
Elbaum, B., & Vaughn, S. (2001). School-based interventions to enhance the self-concept of students with learning disabilities: A meta-analysis. *The Elementary School Journal,* Vol. 101, No. 3, 303-329.
Gniewosz, B., Eccles, S.J. and Noack, P.(2011), Secondary School Transition and the Use of Different Sources of Information for the Construction of the Academic Self-concept. *Social Development.* Published by Blackwell Publishing, Ltd. 1-21.
Gresham, F. M., Elliott, S. N., & Evans-Fernandez, S. E. (1993). Student self-concept scale manual. Circle Pines, MN: *American Guidance Service, Inc.*
Harter, S., Whitesell, N.R., & Kowalski, P. (1992). Individual differences in the effects of educational transitions on young adolescents' perceptions of competence and motivational orientation. *American Educational Research Journal,* Vol. 29, 777–807.

Janice, E. W, and Montgomery, D. (1994). Frame of Reference Theory of Self-Concept Formation
with Academically-Able Students. Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 4-8, 194). *Educational Resources Information Center* (Eric). 1-20.

Jacobs J. E., Lanza, S., Osgood, D. W., Eccles, J. S., Wigfield, A. (2002). Changes in children's self-competence and values: gender and domain differences across grades one through twelve. *Child Development,* Vol.73, No. 2, 509-27.

Lent, R. W., Brown, S. D., & Gore, P. A. (1997). Discriminant and predictive validity of academic self-concept, academic self-efficacy, and mathematics-specific self-efficacy. *Journal of Counseling Psychology*, Vol. 44, 307-315.
Available on line at:*users.ugent.be/~mvalcke/CV/selfeffiacy_selfconcept.pdf*

Marsh, H. W. (1986). Verbal and math self-concepts: An internal/external frame of reference model. *American Educational Research Journal*, Vol. 23, 129–149.

Marsh, H. W. (1990). Influences of internal and external frames of reference on the formation of Math and English self-concepts. *Journal of Educational Psychology,* Vol. 82, 107-116.

Marsh, H.W., Byrne, B., & Shavelson, R.J. (1988). A multifaceted academic self-concept: Its hierarchical si ructure and its relation to academic achievement. *Journal of Educational Psychology*, SO, 366-380.

Meaning, A. M. (2007). Self-concept and Self-esteem in Adolescents. *Student Service*, pp. 11-15.
Available at: www.nasponline.org/families/self-concept

Wigfield, A. & Eccles, S. J. (2000). Expectancy–Value Theory of Achievement Motivation *Contemporary Educational Psychology,* Vol. 25, 68–81.

Wigfield, A., Lutz, L. S. & Wagner L. A. (2005). Early Adolescents'Development Across the Middle School Years: Implications for School Counselors. *Professional School Counseling,* Vol. 9, No. 2, 112-119.

Williams, E J. & Montgomery, D. (1994). Theory of Self-Concept Formation with Academically-Able Students. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, April. *Educational Resources Information Center Eric,* pp. 1-20.

Dissertations

Bacon, Sh. C. (2011). Academic self-concept and academic achievement of African American students transitioning from urban to rural schools. PhD dissertation., University of Iowa. Available on line at: http://ir.uiowa.edu/etd/1198.

Christensen, E. J. (2007). Female adolescents identified with emotional disturbance and adjudicated female adolescents: A comparison of self-concepts. PhD dissertation. University of North Texas.
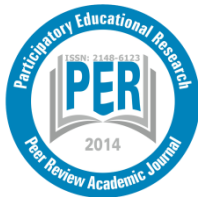
An Examination of Secondary School Students' Academic Achievement in Science Course and Achievement Scores in Performance Assignments with Regard to Different Variables: A Boarding School Example

Aykut Emre Bozdoğan[*]
Giresun University, Faculty of Education, Giresun, Turkey

Esra Günaydın
Giresun University, Institute of Science, Giresun, Turkey

Alperen Okur
Giresun University, Institute of Science, Giresun, Turkey

The aim of the study is to explore the academic achievement and performance tasks of students studying in a regional primary boarding school in science course with regard to different variables. The study was carried out via survey method and total 96 students, 57 of them boarding students and 39 of them non-boarding students studying in the 5th, 6th, and 7th grades in a regional primary boarding schools, participated in the study. The data of the study was obtained from the academic performance grade point average which the students got from three different exams in Science course and performance grade point average the students got from two different performance assignments (preparing a poster). MANOVA and correlation analysis were used for the statistical analysis of the data which were collected to seek answers for the sub-problems stated within the general framework of the research. The findings revealed that there is not a significant difference between the grade levels and the students' academic achievement scores and performance scores in science course, whereas a significant difference was found between the gender variable and performance scores, which was in favour of females. This result suggests that female students were more successful than male students when compared to performance assignments. Moreover, a meaningful difference was detected in favour of non-boarding students with regard to their academic achievement in science course and their grades in performance assignments. Finally, it was found that there was a moderate positive correlation between the students' academic achievement scores in science course and performance scores in performance assignments.

---

[*] *Correspondence: aykutemre@gmail.com*

Introduction

The traditional education program changed in Turkey in 2005-2006 academic year and since then, an education program based on constructivism has been adopted. In addition to the assessment and evaluation techniques which are oriented for product, alternative assessment and evaluation techniques which assess both the product and the process together have gained importance in the new curriculum which is based on constructivism. Both the product and the process are focused on during the process of evaluation of student performances within the context of alternative assessment and evaluation techniques and thanks to performance assessment, a teacher has an opportunity to identify clearly how students understand knowledge and apply it (Bahar et. al., 2010). One of the performance assessment methods is performance tasks (Secer, 2010). Performance tasks, one of the alternative assessment and evaluation techniques and used in performance assessment (Öztürk, 2010), are activities which consider students' individual differences and give opportunities to the students to apply the skills and knowledge they have to the problem situations they experience (Arı, 2002; MEB, 2004). Moreover, performance tasks are activities which enable students to use their creativity and make them active participants (Uzoğlu et. al., 2013). In the renewed education program, it has been considered appropriate that students are required to prepare performance tasks in each lesson to develop their research and thinking skills and assess their learning process (Yılmaz & Benli, 2011). Talking, singing, drawing a picture, making deductions from a map, preparing a poster, brochure, leaflet about a specific topic, writing a play, and doing an experiment can be given as examples of performance tasks (Kırılmazkaya, Keçeci & Kırbağ Zengin, 2011). In order to apply performance tasks, students must have opportunities to actualize research and assignments in their real lives (Adanalı, 2008). When compared from these aspects, it is clear that students differ from each other regarding the opportunities they have. This difference is specifically experienced in regional boarding schools.

Regional primary boarding schools are the primary schools which are established for the purpose of meeting the basic educational needs of the children who have reached the age of compulsory education but who live in the rural areas which have less and scattered population such as village, fields, or a nomad camping site and do not have easy access to education close to their homes. Besides receiving education in these schools, students are provided with opportunities such as accommodation, health care, school expenses, and food. These schools were first opened as regional village schools in villages in 1942 and they turned into regional primary boarding schools in time (MEB, 2003). In 2012-2013 academic year, 5th, 6th, 7th, and 8th grade students were admitted to Regional Primary Boarding Schools. 1st 2nd, 3rd, and 4th grade students who used to study in these schools were then provided transportation to go to schools close to their homes. With this change, Regional Primary Boarding Schools were called Regional Secondary Boarding Schools (Official Gazette, 2012)

Regional Primary Boarding Schools (YİBOs) fulfil very important functions in the regions where they are located. Specifically, they undertake considerably important missions regarding students' personal development, keeping up with the changing world, and providing social and cultural development of their regions as well as meeting their own cultures and the era (Şenol & Yıldız, 2009). Although boarding schools try to provide education opportunities for the children living in small settlements and in the regions with scattered population, it is considered that because children live far way from their families and experience adaptation problems, these will have an effect on their academic achievement and attitudes towards school.

The study which is carried out within this context aims at examining and detecting the relationship between the academic achievement and performance assignment achievement scores of students studying in a regional secondary boarding school in science course with regard to different variables. The study sought answers to the following questions:

(1) Is there a relationship between the students' academic achievement in science course and performance assignment achievement scores which they take within the context of this course?
(2) Is there a relationship between the students' genders, grade levels and being a boarding or non-boarding student and their academic achievement in science course and performance assignment achievement scores which they take within the context of this course?

Method

Research Method

In the research, survey method, one of the quantitative research methods, was used. This method is conducted to shed light on the event, to make evaluations in line with standards, and to reveal the possible relationship between the events. The main purpose of such research is to identify and explain the case which is examined in detail (Çepni, 2012). This method was chosen in the study because the relationship between the students' academic achievement scores which they got from the science course and their academic achievement scores they got from the performance assignment in the same course was explored regarding different variables.

The population of the Study

The research was carried out in a regional secondary boarding school located in Giresun in the first term of 2012-2013 academic year. Total 96 students, 57 boarding and 39 non-boarding, participated in the study.

Data Collection Tool

The research data was obtained from the academic performance grade point average which the students got from the three different exams in science course and performance grade point average the students got from two different performance assignments (preparing a poster). Students' academic achievement scores and performance assignment scores were assessed out of 100. Students' performance tasks were evaluated by two different researchers working independently of each other via analytical rubric. Analytical rubric consists of 5 different sections and each section is 20 point. These sections in the rubric consisted of content, appearance, originality, use of material/ materials' in accordance with each other, and time.

The content of the academic achievement tests and the performance tasks assigned were organized according to the grade levels and they were presented in Table 1.

Table 1. Information about the content of academic achievement tests and performance assignments

Grade	Learning domain	Unit	Subject	1st Exam	2nd Exam	3rd Exam	Performance Assignments (Poster preparation subjects)
5th GRADE*	Living Beings and Life	Let's solve the puzzle of our body	a) Nutrition and balanced diet b) Digestion and Excretion of food c) Unhealthy agents				a) Nutrient content of food and their functions b)Digestive system organs and their functions organ c)Excretory system organs and their functions c) Kinds of teeth and their functions d) Unhealthy agents and their effects on the body e)Water cycle and the events occurring at that moment f)The difference between temperature and heat g) Contact and non-contact forces
	Matter and Change	Changes in matter and its recognition	a) Water turns into different states b) Heat and temperature c) Heat effects materials d)Distinctive characteristics of matter				
	Physical Events	Force and motion	a)Contact and non-contact forces b) Let's learn the magnets c)Friction force				
6th GRADE **	Living Beings and Life	Reproduction, growth, and development of living beings	a) The fundamentals of living being: Cell b) Human reproduction, growth, and development c) I am not a child anymore d)Animal reproduction, growth, and development e) Reproduction of flowering plants f) Plant germination, growth, and development				a)The structure of plant and animal cell, their organelles and functions b) Characteristics of egg and sperm cells c) Female and male reproductive organs and their functions d) Physical and psychological changes that occur with the females and females during puberty e) Features of vertebrates and invertebrates such as reproduction and baby animal care f) Reproductive organs of flowering plants, pollination and fertilization g) Seeds of different colours and shapes h) Speed of various vehicles i) Differences between mass and weight j) Features of atom, element, and compounds
	Physical Events	Force and Motion	a) Speed in our life b) Let's discover force c) Forces are in charge d) Weight is a force				
	Matter and Change	Changes in matter and its recognition	a) Particles that make up matter b) Elements and their compounds c) Physical and chemical change d) States of matter and its structure				
7th GRADE ***	Living Beings and Life	Systems in our body	a)Digestive system and health of digestive system b)Excretory system discharges wastes from our body c)Controlling-regulating systems d) Sense organs e)Health of the systems in our body and organ donation				a) Functions of digestive system organs b) Excretory system organs and their functions c)Nervous system organs and their functions d) Regulatory system organs and their functions e)Sense organs and their functions f) Kinds of springs, their features and weight-stretching graphic g) Features of kinetic and potential energy and energy conversion (the process of changing one form of energy to another) h) Types of simple machine and their use
	Physical Events	Force and Motion	a) Let's learn the springs b) Work and force c)Simple machines in our life d) Energy and friction force				
		Electricity in our life	e) Electrification f) Electric current				

* 5th grade exam questions and grading; 1st Exam (23 point matching questions, 17 point showing on the figure questions , 20 point true-false questions, and 40 point multiple choice questions).
2nd Exam (20 point classification questions, 10 point open –ended questions, 10 point demonstrating on the figure questions, 20 point true-false questions, and 10 point fill in the blanks questions, and 30 point multiple choice questions); 3rd Exam (100 point multiple choice questions)
** 6th grade exam questions and grading; 1st Exam (30 point classification questions, 30 point showing on the figure questions, 20 point true-false questions, and 20 point multiple choice questions) 2nd Exam (28 point open-ended questions, 20 point true-false questions, 12 point fill in the blanks questions and 40 point multiple choice questions) ; 3rd Exam (100 point multiple choice questions).
*** 7th grade exam questions and grading; 1st Exam (20 point matching questions, 30 point showing on the figure questions, 20 point true-false questions, and 30 point multiple choice questions).
2nd Exam (10 point drawing graph questions , 18 point open-ended questions, 20 point true-false questions, 20 point fill in the gaps questions, and 32 point multiple choice questions; 3rd Exam (100 point multiple choice questions).

Data Analysis

MANOVA and correlation analysis were used to determine the differences between the independent variables within the context of statistical analysis of the data obtained from the sub-problems whose answers were sought within the framework of general purpose of the research. The data related to numerical developments were presented in tables and interpreted. Moreover, whether there was a significant difference between the independent variables or not was tested at the level of $\alpha = .05$.

Findings

The correlation between the academic performance grade point average the students who participated in the study got from the science course exams and their performance assignment grade point average and the gender was analysed and it was presented in Table 2.

Table 2. Correlation analysis related to students' academic achievement scores in science course and performance assignment achievement scores

Variable	N	$\overline{X}$	S	r	p
Academic achievement score	96	55.07	10.66		
Performance assignment achievement score	96	79.08	16.21	0.471	**.000**

When Table 2 is examined, there is a significant difference between the students' academic achievement scores in science course and performance assignment achievement scores (r=.471, p=.000, p<.05). When the direction and magnitude of this relationship is examined, it is revealed that there is a moderate positive relationship.

Table 3. MANOVA results related to the students' genders and students' academic performance grade point average from the exams in science course and performance assignment grade point average

Variable	Gender	N	$\overline{X}$	S	sd	F	p
Exam Scores	Male	51	55.00	15.39			
	Female	45	55.15	17.27	1-94	.002	.963
	Total	96	55.07	16.21			
Performance Assignment Scores	Male	51	76.07	10.51			
	Female	45	82.48	9.89	1-94	9.393	**.003**
	Total	96	79.08	10.66			

A significant difference was detected between the students' academic achievement grade point average in science course and performance assignment achievement grade point average and the gender variable[$(\lambda_{\text{Wilks' Lambda}})$=0.885, $F_{(2-93)}$=6.041, p=0.003, p<.05]. This finding demonstrates that the points which will be obtained from the linear components composed of students' academic achievement scores in science course and performance assignment achievement scores change depending on the gender. When Table 3 was examined in this context, it was found that academic achievement grade point average of male students in the exams in science course is ($\bar{x}$=55.00) and the females' grade point average is ($\bar{x}$= 55.15). It was viewed that there was not a meaningful difference between the students' academic achievement grade point average [$F_{(1-94)}$= 0.002, p>.05]. Therefore, this result reveals that the academic performances of female and male students are equal. However, the academic performance grade point average of male students in performance assignments which they took within the context of science course was determined to be ($\bar{x}$=76.07) and the academic performance grade point average of female students was ($\bar{x}$= 82.48). It was discovered that there was a significant difference between the performance assignment scores of the students which they took within the context of science course in favour of female students [$F_{(1-94)}$= -9.393, p<.05]. It can be stated in this context that female students are more successful than male students regarding performance assignments.

The relationship between the students' academic achievement grade point average in the exams in science course and performance assignment grade point average and their being boarding students were examined and presented in Table 4.

Table 4. MANOVA results related to the students' being boarding and students' academic performance grade point average from the exams in science course and performance assignment grade point average

Variable	Being a boarding student	N	$\overline{X}$	S	sd	F	p
Exam Scores	**Boarding student**	57	50,21	13,94			
	Non-boarding student	39	62,17	16,83	1-94	14.391	**.000**
	Total	96	55,07	16,21			
Performance Assignment Scores	**Boarding student**	57	77,12	10,83			
	Non-boarding student	39	81,94	9,86	1-94	4.934	**.029**
	Total	96	79,08	10,66			

A significant difference was detected between the students' academic achievement grade point average in science course and performance assignment achievement grade point average and being boarding or non-boarding students[$(\lambda_{\text{Wilks' Lambda}})$=0.864, $F_{(2-93)}$=7.333, p=0.001, p<.05]. This finding shows that the points which will be obtained from the linear components composed of students' academic achievement scores in science course and performance assignment achievement scores change depending on receiving education as a boarding student.

When Table 4 was examined within this context, it was found that academic achievement grade point average of boarding students from the exams in science course is ($\bar{x}$=50.21), and non-boarding students' grade point average is determined to be ($\bar{x}$= 62.17). It was revealed that there was a significant difference in favour of non-boarding students regarding the differences between

their academic achievement grade point averages [$F_{(1-94)}$= 14.391, p<.05]. This finding demonstrates that the students who continue their education near their families are more successful in science course than the boarding students.

In addition to this, it was found that the performance assignment academic achievement grade point averages of boarding students were ($\bar{x}$=77.12) whereas the academic achievement grade point averages of non-boarding students were determined to be ($\bar{x}$ = 81.94).

Moreover, it was revealed that there was a significant difference in favour of non-boarding students with regard to the differences in performance assignment scores which they took within the context of science course[$F_{(1-94)}$= 4.934, p<.05]. It can be stated within this context that the students who continue their education near their families are more successful in performance assignments.

The relationship between the students' academic achievement grade point averages from the exams in science course and performance assignment grade point averages and their grade levels were examined and presented in Table 5.

Table 5. MANOVA results related to the students' grade levels and students' academic performance grade point averages from the exams in science course and performance assignment grade point averages

Variable	Grade Level	N	$\overline{X}$	S	sd	F	p
Exam Scores	**5th Grade**	24	52.66	17.55			
	6th Grade	34	55.11	16.27	2-93	0.417	.660
	7th Grade	38	56.55	15.53			
	Total	96	55.07	16.21			
Performance Assignment Scores	**5th Grade**	24	74.83	11.04			
	6th Grade	34	79.97	11.07	2-93	2.713	.072
	7th Grade	38	80.97	9.53			
	Total	96	79.08	10.66			

There is not a significant difference between the students' academic achievement grade point averages from the exams in science course and performance assignment grade point averages and their grade levels [($\lambda_{\text{Wilks' Lambda}}$)=0.944, $F_{(4-184)}$=1.350, p=0.253, p>.05]. This finding indicates that the points which will be obtained from the linear components composed of students' academic achievement scores in science course and performance assignment achievement scores do not change depending on grade levels. When Table 5 was examined within this context, it was found that academic achievement grade point averages of 5th grade students from the exams in science course is ($\bar{x}$=52.66), 6th grade students' grade point average is ($\bar{x}$ = 55.11) and the grade point averages of the students studying in Grade 7 is determined to be ($\bar{x}$ = 56.55). Although students' academic achievement increases with an increase in their grade levels, it is found that this rise was not at a significant level [$F_{(2-93)}$= 0.417, p>.05]. Moreover, it was determined that the performance assignment achievement grade point averages of the students studying in the 5th grade was ($\bar{x}$ =74.83), it was ($\bar{x}$ = 79.97) for the students' studying in the 6th grade, and the grade point averages

were ($\bar{x}$ = 80.97) for the 7th grade students. Although students' performance assignment scores increase with an increase in their grade levels, it is revealed that this increase was not at a significant level [$F_{(2\text{-}93)}$= 2.713, p>.05].

Results and Discussion

As a result of the study, a significant relationship was identified between the students' academic achievement scores in science course and performance assignment achievement scores (Table 2). When the direction and magnitude of this relationship was examined, a positive relationship at a moderate level was determined. When relevant literature is reviewed, it is revealed that there is a positive relationship between the students' academic   achievement and their state of doing the assignments and their attitudes towards performance assignments (Çelik & Aktürk, 2009, Gedik & Orhan, 2013; Gür, 2002; Kumandaş & Kutlu, 2010; Uzoğlu et. al., 2013). It can be stated that the findings of this study which was conducted within this context show parallelism with the literature. Another result in the study is the relationship between the gender variable and academic achievement and performance assignment achievement. For that purpose, it was discovered that there was not a significant difference between the students' academic achievement in science course and gender; however, it was found that there was a significant difference in favour of female students regarding their scores in performance assignment which they took within the context of science course (Table 3). This finding reveals that regarding performance tasks, female students are more successful than male students. It was stated in the literature that unlike male students, female students have positive attitudes towards the assignments given at a significant level and they also exhibited more positive attitudes than males. The reason for this is that female students are more disciplined, dutiful, submissive and organized(Hong, 1999, Yeşilyurt, 2006) and it might also result from the fact that female students' physical/kinaesthetic and interpersonal/social intelligence points are higher that male students (Pekdemir & Akyol, 2011). Another study conducted in boarding schools revealed that female students exhibited more positive attitudes towards school than male students and they were more compatible than boys (Buckner, Bassuk & Weinreb, 2001; Coşkun, 2004; Çetinkaya, 2013; Lucia et al., 2000; Wentzel, 1997). The reason for this is that there are still families living in the villages and who are still against sending their daughters to school and female students consider boarding schools as the only opportunity and chance to receive education (Çetinkaya ve Gelişli, 2014). It can be considered that the female students' being more successful in performance assignments than males may have resulted from these facts. The findings of the study revealed that the higher the grade levels got, the higher academic achievement scores in science course and performance assignment scores students had ; however, it was determined that the difference was not at a significant level (Table 5). This result demonstrates that the understanding level of science course which is described as abstract and which students have mostly difficulty in understanding has increased due to the grade levels and thus increasing age. The other studies conducted reveal that as the grade levels increase, there is an increase in students' performance of doing homework and students do their homework more consciously as they progress through the grade levels (Cooper, Robinson & Patall, 2006; Gedik & Orhan, 2013).

The most important finding in the research is the relationship between the academic achievement in science course and performance assignment achievement scores of the boarding students and

the students who receive education near their families. Within this framework, it was discovered that there was a significant difference in favour of non-boarding students regarding both their academic achievement in science course and performance assignment achievement scores (Table 4). In other words, it can be stated that the students who continue their education near their families are more successful both in science course and performance assignments which they took within the context of science course. When literature is examined, it is found that unlike other students, boarding students have more difficulty in adapting to school due to their being far away from their families and lack of interest from their families (Ak & Sayıl, 2006; Barth et. al., 2004; Kazu & Aşkın, 2011; Küçük & Arıkan, 2005), their level of readiness is low and this results in academic failure (İnal, 2009). It was found in the other studies conducted that there was a very close parallelism between the students' academic achievement and families' level of interest in a child (Guest & Biasini, 2001; Halıcı, 2005; Pettit, Bates & Dodge, 1997; Wentzell, 1997) and it was found that the performance of students studying in boarding schools were low when compared to other students (Arı, 2002; Udum, 2012).

In the light of this study and the other studies in literature, giving performance assignments, homework, research projects on any science topics which students like can make contributions to increase students' science achievement. Moreover, teachers can provide more academic support to male students who take performance tasks, so contributions are made to increase their performance task achievement. In addition to this, students in boarding schools do not feel themselves valuable and important and thus they are not expected to adapt to this environment and feel happy and peaceful. However, if students feel themselves valuable, their self-esteem will increase and they will feel happy and peaceful in the environment where they exist and this will make contributions to their academic and social development.

References

Adanalı, K. (2008). Alternative assessment in Social science: The evaluation of alternative assessment practices in 5th grade Social Science lessons. Çukurova University Institute of Social Sciences, Adana, Turkey. (Unpublished Master Thesis).

Ak, L., & Sayıl, M. (2006). Three different types of elementary school students' school achievements, perceived social support, school attitudes and behavior adjustment problems. *Educational Sciences: Theory & Practice, 6*(2), 293-300.

Arı, A. (2002). Evaluation of the primary application: Normal, transported and boarding comparison of primary school. *National Education, no:153-154.*

Bahar, M., Nartgün, Z., Durmuş, S. & Bıçak, B. (2010). Traditional-Complementary Assessment and Evaluation Techniques (4. Press). Anı Publishing, Ankara, Turkey.

Barth, J. M., Dunlap, S. T., Dane, H., Lochman, J. E., & Wells, K. C. (2004). Classroom environment influnces on aggression, peer relations and academic focus. *Journal of School Psychology, 42*,115-133.

Buckner, J. C., Bassuk, E. L., & Weinreb, L. F. (2001). Predictors of academic achievement among homeless and low-income housed children. *Journal of Scholl Psychology, 39*(1), 45-69.

Cooper, H., Robinson, J. C. & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987-2003. *Review of Educational Research, 76,* 1-62.

Coşkun, L. (2004). The Relationship between academic achievements, the social support received, attitude towards school and behavior-adjustment problems in boarding, bussing and "normal" primary school students. Hacettepe University, Institute of Social Sciences, Ankara, Turkey. (Unpublished Master Thesis).

Çelik, S. & Aktürk, Z. (2009). An attempt to increase student performance in a classical classroom setting: Effects of seating arrangement and doing homeworks. *National Education, 181,* 37-43.

Çepni, S. (2012). Introduction to Research and Project Work. Celepler Printing, Trabzon, Turkey.

Çetinkaya, M. (2013). Regional primary boarding school students' views on the functioning of their schools: Example of Kahramanmaraş province. Gazi University, Institute of Educational Sciences, Ankara, Turkey. (Unpublished Master Thesis).

Çetinkaya, M. & Gelişli, Y. (2014). Regional primary boarding school students abouth regional primary boarding school function. *The Journal of The Industrial Arts Education Faculty of Gazi University, 33*, 1-8.

Gedik, M. & Orhan, S. (2013). Views of the students attending 6th and 7th grades of primary schools on Turkish subject homeworks. *Journal of The Black Sea Studies, 38*, 135-148.

Guest, K. C., & Biasini, F. J. (2001). Middle childhood, poverty, and adjustment: Does social support have an impact? *Psychology in the Schools, 38*(6), 549-559.

Gür, H. (2002). The effect of doing homework style to academic achievement. *Math Activities Symposium,* May, Ankara, Turkey.

Halıcı, P. (2005). A study on self-concept and aggressiveness tendencies of children 12-14 age group living together with their families and attending the regional boarding primary schools. Ankara University Institute of Science, Ankara, Turkey. (Unpublished Master Thesis).

Hong, E. (1999). Preffered and actual homework style: A cross cultural examination. *Educational Research Journal, 41*(3), 251–265.

İnal, U. (2009). Examining perception of teachers and students at elementary boarding district school in borders of Adana province with respect to the quality of school life. Çukurova University Institute of Social Sciences, Adana, Turkey. (Unpublished Master Thesis).

Kazu, İ. Y. & Aşkın, Z. (2011). The problems faced in study periods and in leisure-time activities at regional boarding primary education schools: A case study of Elazığ. *Pegem Journal of Education and Instruction, 1*(3), 39-46.

Kırılmazkaya, G., Keçeci, G. & Kırbağ Zengin, F. (2011, Mayıs). The detection of elementary students' uses information and communication technologies for performance tasks in science and technology course. International Advanced Technologies Symposium, 16-18 May, Elazığ, Turkey.

Kumandaş, H. & Kutlu, Ö. (2010). The factors affecting 5th grade students' attitudes towards performance tasks. *Elementary Education Online, 9*(2), 714-722.

Küçük, Y. & Arıkan D. (2005). The determination of the hopelessness levels of children with hearing impaired. *International Journal of Human Sciences. 2*(2), 1-13.

Lucia, R. C. S., Gesten, E., Rendina-Gobioff, G., Epstein, M., Kaufmann, D., Salcedo, O. (2000). Children's school adjustment: A developmental transactional systems perspective. *Journal of Applied Developmental Psychology, 21*(4), 429-446.

MEB (2003).Yatılı ilköğretim bölge okulları ve pansiyonlu ilköğretim okulları yönetici kılavuz kitabı. Milli Eğitim Basımevi, İstanbul, Türkiye. [Ministry of Education, Administrator

Guide Book about Boarding and Pensioned Primary Schools, National Education Publishing, İstanbul Turkey.]

MEB (2004). İlköğretim Fen ve Teknoloji Dersi Öğretim Programı. Talim ve Terbiye Kurulu Başkanlığı, Ankara. [Ministry of Education, Elementary Science and Technology Curriculum. Head of Instruction and Education Board, Ankara, Turkey.]

Resmi Gazete (2012). Millî Eğitim Bakanlığı İlköğretim Kurumları Yönetmeliğinde Değişiklik Yapılmasına Dair Yönetmelik. No: 28360.[Official Gazette, Ministry of National Education, Amending the Primary Schools Regulation, No: 28360].

Öztürk, P. (2010). The evaluation of relation between success grades of Turkish lesson performance task and academic success and attitude to lesson in primary education school level. Karadeniz Teknik University Institute of Social Sciences, Trabzon, Turkey. (Unpublished Master Thesis).

Pekdemir, Z. & Akyol, A. (2011). An analysis of multiple intelligence domains of 5th grade students attending different primary schools. *Journal of Theoretical Educational Science, 4*(1), 154-163.

Pettit, G. S., Bates, J. E. & Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: a seven-year longitudinal study. *Child Development,68*, 908-923.

Secer, M. (2010). Primary school teachers' and students' opinions about performance assignments and using internet on preparing performance assignments. Mersin University Institute of Social Sciences, Mersin, Turkey. (Unpublished Master Thesis).

Şenol, D. & Yıldız, S. (2009). Student-Teacher and family interaction in the boarding primary teaching regional schools: The cases of Diyarbakir and Erzurum. *Journal of Çukurova University Institute of Social Sciences, 18*(1), 359-376.

Udum, C. (2012). Review of students' achievement levels in Maths tests of SBS exam between General primary schools and Boarding region primary schools. Fırat University Institute of Educational Sciences, Elazığ, Turkey. (Unpublished Master Thesis).

Uzoğlu, M., Öztürk, P., Bülbül, E. & Küçükaydın, Z. (2013). The effect on students' academic success of performance duty ın science and technology course. *International Journal of Social Science, 6* (1), 1495-1509.

Wentzel, K. R. (1997). Student motivation in middle school: the role of perceived pedagogical caring. *Journal of Educational Psychology, 89* (3), 411-419.

Yeşilyurt, S. (2006). A study on high school students' attitudes towards Biology assignments. *Journal of Erzincan Educational Faculty. (8),* (1), 37-53.

Yılmaz, B. & Benli, N. (2011). The evaluation of performance tasks given at the first degree of primary education according to teachers' opinions. *Dokuz Eylül University Journal of Buca Faculty of Education*, 30, 250-265.

Participatory Approach to Education: an Action Learning Approach at the University of South Africa

Janet McIntyre-Mills[*]
Flinders University, University of Indonesia, University of Islamic Studies,

Gladys Mokwena Kedibone
University of South Africa, South Africa

Akwasi Arko-Achemfuor
University of South Africa, South Africa

Pinkie Mabunda
University of South Africa, South Africa

Esther Njiro
University of South Africa, South Africa

The paper discusses a critical systemic thinking and practice approach to building capacity, enhancing development and addressing public policy and governance concerns through holding in mind many variables and considering the areas of concern of the facilitator and the participants. Inspiration for the approach to learning drew on a range of sources including Bateson on 'the ecology of mind' (1972), Paulo Freire (1982, 2007) on action learning and Checkland and Scholes (1990) for soft systems mapping to address an area of concern with a small group of researchers who are dedicated to working outside the boundaries of a contained discipline or organization in the service of a broad learning community. The participants raised the following as research concerns: unemployment, recognition of prior learning and the need to enhance pathways for adults and young people in learning organisations and learning communities that are responsive to the complex needs of South Africans and those within the wider region. An open approach to education and respecting diverse ways of knowing is a starting point for people's education and community development. The struggle in South Africa for transformation was typified by student protests during Apartheid for the right to a free and equal education system. At UNISA we are reminded of the need to use education as a means to empower and this means beginning with the lived experiences of people.

---

[*] *Correspondence: Janet.mcintyre@flinders.edu.au*

Introduction

A workshop was held at the Department of Adult Basic Education and Training and Youth Development on the 28 July at the University of South Africa (UNISA). UNISA is a distance learning university that has transformed from protest during the Apartheid era of education to policy that respects prior learning and indigenous knowledge.

The aim of the workshop was to demonstrate the participatory approach to action learning with graduates and staff through engaging in a round table research conversation that I was invited to facilitate by ABET and Youth Development staff and a colleague from the School of Teacher Education.

An ‘ecology of mind’ for participatory action learning, design and praxis

An ‘ecology of mind’ (Bateson, 1972) means thinking about thinking through moving from approaching an area of concern with just level 1 learning from one set of lenses or one paradigm to moving to level 2 learning with involves comparing and contrasting approaches from different experiences and with insights from different disciplines to then developing a level 3 learning approach that involves co-creating, transforming or being innovative. The process involved participants reflecting on their own areas of concern using an adapted ‘Design of Inquiring Systems Approach’ (drawing also on Kenneth Bausch, Capra, West Churchman, Alexander Christakis, Stuart Hall, Paulo Freire and Checkland and Scholes) for inspiration to foster an ecology of mind and open, critical approach to mapping an area of concern by considering the implications of thinking for practice and implementation.

Participatory Action Research and Action Learning Process and Methodology– Pooling Experience, Questioning and the Dialectic

Five participants engaged in a research conversation to explore areas of concern and to co-create an understanding of research priorities and research directions for ABET and Youth Development. The action learning process involved a systemic approach where facilitation and two-way learning were modelled by sitting in a circle and facilitating a conversation that drew on each participant’s lived experiences. The starting point is a recognition that people identify with learning processes that are meaningful and relevant to their own areas of concern. I shared my own concerns about complex challenges associated with climate change and the implications for food, energy and water within and beyond the boundaries of the nation state. I explained that Joseph Stiglitz (previous chief economist of the World Bank) visited Australia at the invitation of the Productivity Commission in 2010 and that he stressed the need for nation states to re-consider what they value and why. This has led me to develop research on pathways to wellbeing to reframe the notion of economics to consider that the economic bottom line of profit needs to be replaced with a more systemic approach that goes beyond the raft of indicators mentioned in “Mis-measuring our lives” to consider alternative ways of being, doing, having and interacting based on the work of Max Neef (1991).

Thus the conversation began with an introduction of my own interests and research passions and then a request for the participants to express their own concerns and to pool resources to assist

them to address their own research tasks. A community of practice means a network of people who agree to work together to address a shared area of concern and to give and receive assistance to one another, in order to achieve the identified tasks.   I invited the research conversation participants to:

- Think about how they could use their own prior learning to inform their area of concern for research. The idea is to apply PAR to learning with participants so that learning builds on what we already know. The creative energy of learning together creates an environment of creativity that fosters learning.
- Engage in considering their own areas of concern and suggested that we strive to consider each strand of experience and that perhaps we could co-create meaning as a result of weaving together the strands of experience in conversation.

Participants focused on their specific areas of concern and questions with the following process:

- Each participant was asked to discuss their own area of concern for research. As facilitator I modelled the process by first explaining my own area of concern for developing transdisciplinary approaches to research and practice and mapped some of the ideas on a white board whilst I shared my broad research interests as a precursor to listening to each of the participants own interests and concerns I linked my lenses with my area of policy concern with What? Who? Why? How? and So what questions? For example: what models exist for developing alternative pathways to learning? How could these be implemented? What are the possibilities for undertaking a pilot action learning and PAR project to demonstrate ways of developing partnerships within and beyond the boundaries of UNISA with the community and a range of public, NGO and government organisations to foster a learning community approach to capacity building?
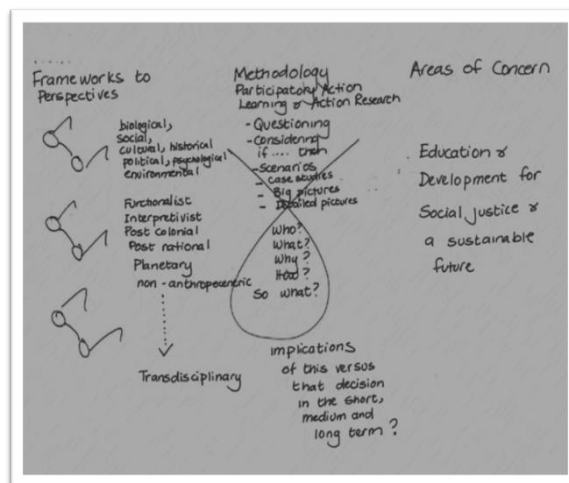
Figure 1: Methodology and Area of concern (FMA approach) approach to my own area of concern

- Then I asked participants to reflect on their concerns using the following conceptual map

(drawing in Checkland and Scholes) :

FMA approach

Frameworks	Methodologies	Area of Concern
Lenses Social Cultural Political Ethical Environmental Functionalist Interpretivist Post modern Post disciplinary Post colonial Transdisciplinary	Case studies What Why How So what	

Figure 2: Methodology and Area of concern (FMA approach) to inspire thinking about designing a response to their own areas of concern

- Through dialogue we developed a shared area of concern and decided to develop a community of practice to write this joint paper on participatory approaches to adult education as well as some additional papers in this journal that have been developed as a result of the 'community of practice'.

The research conversation:

- Discussed many social, economic and environmental dimensions impacting on unemployment, development, capacity building and education.
- Demonstrated ways to work across a range of cultures, theories and disciplines to develop a response to challenges that span spatial, conceptual and temporal boundaries and the need to be informed by diverse ways of knowing. The approach to action learning and participatory action research combines theories in a complementary manner based on matching processes to address an area of concern – through asking questions about the implications of different choices for their research and for their practice (see Borradori, 2003, Gunaratne,2012).

The process strives to enable the participants to show personal and interpersonal agency in creating and co-creating new approaches that respond to the context and that take into account cultural diversity spanning the subjective, intersubjective and objective domains of their knowledge and the knowledge of the people with whom they undertake research.

The approach to PAR draws on Wenger et al (1998, 2009) on '*Learning, meaning and identity'* and digital habitas as a basis for setting up communities of practice within and beyond organizational boundaries to create learning communities (adapted from Senge, 1994, 1999). Wadsworth's (2010) contribution to 'human inquiry for living systems' using participatory action research also provides inspiration. As does the work by Romm (2001) on the importance of

combining appropriate methods to enhance representation and accountability; whilst my own transdisciplinary and cross cultural experiences as an action researcher in a range of urban and rural contexts and as an action learning facilitator in higher education provide a basis for the proposed project. In contrast to top down decision making or processes that favour control by specialists or professionals that often lead to unethical and unsustainable decisions, the research conversation participants were asked to think about alternative ways to engage with adult learners and young people.

They were asked to draw on a range of disciplines when considering an area of concern and invited to address contextual considerations (social, economic and environmental spanning different levels of praxis pertaining to education, development and capacity building to enhance employment opportunities) and to reflect on personal and interpersonal considerations from their own experience.

Contradictions between rhetoric and reality, paradoxes and the implications for policy and practice through dialogue were explored with regard to unemployment, education and training and the need to recognize prior learning and lived experience, in order to make a practical difference to the life chances of South Africans.

The process of reflection used the Design of Inquiring Systems Approach (meaning the questioning approach that explores many ways of knowing) to engage in participatory action research and action learning. The DIS approach enables a careful consideration of where to draw the boundaries of what and who is included and the consequences of leaving out particular people or issues when reaching a decision on who to allow to study specific courses at UNISA and under what conditions.

We discussed the importance of considering many ways of knowing. It was stressed that many entrepreneurs in rural and urban areas have skills that need to be recognized. Recognition of competencies in recycling, arts, for example could become the basis for an arts or business qualification linked with a sustainable living approach.

I suggested we consider the areas of concern for participatory action research and action learning spanning many different knowledge domains (drawn from West Churchman, 1979) as a possible starting point. These ways of knowing include the subjective (personal perceptions, values, emotions and intuition); objective (lived experiences and empirical knowledge) and intersubjective dimensions (understanding of the meaning of Ubuntu and its relevance for developing social capital) were highlighted originally by Habermas (e.g. 1984). Chuchman's five domains span: logic, empiricism, dialectic, idealism and pragmatism:

- Logic refers to the way in which arguments are structured and the relationship across ideas that build from premises to a logically supported conclusion. Argument needs to be developed so that the logical flow is continuous and so that it supports the conclusion. The flow of ideas upstream will affect the pool of experience and the conclusion downstream.
- Empiricism refers to both qualitative and quantitative dimensions of knowledge that reflect the meanings of diverse stakeholders by faithfully representing their points of view.

Participatory Educational Research (PER)

Quantitative data are based on collecting data to represent patterns and weightings of the number of times particular ideas have been expressed, for example.

- The dialectic refers to the ability to engage in co-created knowledge that is intersubjective. The process used in this workshop modelled this approach to begin to 'unfold' the ideas of all the stakeholders and to sweep in the social, cultural, political, economic and environmental dimensions that affect the framing of an area of concern. We explored what needs to be included or excluded when considering unemployment in South Africa and education to address the needs of people of all ages. The potential of the young to learn from the old and vice versa through appreciation of lived experience, innovation, art, narrative and design needs to be further explored through participatory action learning and action research projects. Nussbaum and Glover (1995) have stressed the capabilities approach as a way to enable people to meet strategic needs through empowering them at home, at school, at work, at play and giving people a voice. State, market and civil society need to work together to enable and empower workers and learners through co-creating partnerships.

- Idealism is the domain of knowledge that refers to what ought to be done in ethical terms to meet ideals or essential living standards or quality of life, whilst expanding pragmatism ensures that the consequences of decisions for others and the environment are considered in the short, medium and long term through testing out ideas with people within and beyond the learning environment of universities and schools to create learning communities beyond the walls of the institutions.

This is an incomplete list however that needs to be extended to include:

- Non-anthropocentric knowing (De Waal, 2000, McIntyre-Mills, 2014) drawing on the environment as well as knowing through all our senses – including empathy and intuition along with:

- Respect for 'know how' developed through experience based on empirical trial and error

- Creativity in creating sustainable relationships with the land and

- Caring for future generations of life.

- 'Phronesis' or wisdom (Aristotle, see Irwin, 1985) to match the right knowledge in context so as to empower learners through providing them with appropriate pathways to learning within local contexts and with access to the wider environment (Fourade, 2006).

Values and perceptions

An open approach to education and respecting diverse ways of knowing is a starting point for people's education and community development. The struggle in South Africa for transformation was typified by student protests during Apartheid for the right to a free and equal education system. At UNISA we are reminded of the need to use education as a means to empower and this means beginning with the lived experiences of people (Han, Tandon, 2014)

Figure 3: Education for empowerment begins with lived experience

Figure 4: Mandela epitomises the mission of UNISA, namely to strive to overcome obstacles

Mangcu (2014) stresses that the challenge facing South Africa is to remember that freedom and democracy need to be worked at. He draws on Isiah Berlin's "Two Concepts of Liberty" and stresses that fighting for freedom successfully does not make one democratic. Keane (2009) cautions that for democracy to survive – let alone remain vibrant, it requires the active engagement of everyone in society.

Desmond Tutu calls for us to live according to the principles of Ubuntu and he stresses this has implications for all aspects of our lives, including what we value and the way we relate to others. The call to address climate change by Desmond Tutu and the call to live in ways that reflect the philosophy of Ubuntu. He stresses that we are people through other people and we need to be keepers not consumers who live at the expense of others (including sentient beings) and future generations of life:

> "it speaks of the very essence of being human. When we want to give high praise to someone we say, Yu, u nobuntu, hey so- and so- has Ubuntu,

> Then you are generous, you are hospitable, and you are friendly and caring and compassionate. You share what you have. It is to say, my humanity is caught up, is inextricably bound up, in yours….We belong in a bundle of life. We say a person is a person through other persons. It is not I think therefore I am. It says rather; I am human because I belong, I participate, and I share. A person with Ubuntu is open and available to others, affirming of others, does not feel threatened that others are able and good, for he or she has a proper self-assurance that comes from knowing that he or she belongs in a greater whole and is diminished when others are humiliated or diminished, when others are tortured or oppressed, or treated as if they were less than who they are…." Cited from Tutu (2013).

Wellbeing, and not only the economic bottom line, is important – social and environmental indicators of wellbeing need to support economic indicators need. Government response to human wellbeing is often based on economic development, which inadvertently increases consumerism, resulting in greater environmental degradation. Stewardship like all concepts is shaped by assumptions and values. Flannery (2012) considers that stewardship is based on awareness that the land and biologically diverse ecosystems are a cultural heritage on which the wellbeing of current and future generations depends. Anthropocentric versus non anthropocentric stewardship needs to be carefully considered to ensure that human consumption is not at the expense of environmental considerations and future generations of life (Parker, 2012).

Freedom cannot exist at the expense of democracy or vice versa. Currently the fight in carving up government contracts and the permission to spend public money on personal expenses has riddled government. South Africa is food insecure (see Crush and Fayne 2010) and imports more food than it exports. More than half of South Africans do not have regular access to enough food, according to the Human Sciences Research Council Report released in 2014, based on a survey conducted nationwide. Overall, 45.6% of the population are food insecure. The largest percentage of participants who experienced hunger (food insecurity) was in urban informal (32.4%) and rural formal (37.0%) localities (HSRC, 2014).Voices of opposition stress that political parties need to address not only unemployment but under employment and the daily stress of trying to make ends meet, living in debt or being destitute.

The future for South Africa lies in developing learning organisations and learning communities where people feel that they have a voice and a right to a voice and where they do not only participate in vertical democracy through elections that vote in elites who lose connections with the people they are supposed to represent. So the future lies in participatory democracy and more direct interventions:

"Participation is the cardinal principle of democracy—not only because of its intrinsic value, but also because it increases the political efficacy of citizens by giving them direct training in the

policies and tools of governance. Almost 200 years ago, John Stuart Mill suggested that this kind of democratic training is best obtainable at the local level, where citizens can make decisions about issues they can immediately relate to, and then generalize that knowledge to the broader, national political system." (Mangcu, 2014: 31).

What is needed in South Africa is a greater emphasis on core principles and engagement with the people in discursive democracy, if not direct voting as suggested by Mangcu (op cit). Xolela Mangcu (2013) argues that Thuli Madonsela, the Public Prosecutor along with Bishop Desmond Tutu are some of the best examples of leaders left with integrity. The most powerless and voiceless are those who do not have the vote... they are young people, children, asylum seekers, the dis Abled, sentient beings who are commodified and traded and of course the planet which has no rights at all.

So the focus needs to be on the inadequacies of the nation state and the social contract. The recently published volumes "Systemic Ethics and Transformation from Wall Street to Wellbeing" (McIntyre-Mills, 2014) provide a plea and an example of a free downloadable architecture for doing things differently at the meso level.

Local level engagement and wide ranging goals appear to be suggesting new directions, but how do we join up the dots and become more mindful?

Theoretical perspective and community of practice approach to consider the environment of the problem

Systemic approaches consider cause, effect, feedback and the way in which relationships across variables are interrelated and perceived by the different stakeholders. This is because complex challenges cannot be considered in conceptual, spatial or temporal compartments. Stiglitz, Sen and Fitousi (2010) develop an argument for developing 'wellbeing stocks', rather than emphasising profit and productivity in a re-framed economy and society. This resonates with the Indigenous knowledge on the need to act as stewards for future generations. This mainstream publication 'Mismeasuring our lives' by the past Chief Economist of the World Bank, Stiglitz together with Amartya Sen the development economist provides a useful starting point for questioning and developing a more systemic response to building capacity to develop the social, economic and environmental dimensions of society to support a sustainable future. The work of Stuart Hall on critical heuristics and the need to question 'who gets what, when, why and with what implications', is also a vital dimension to praxis responses, as is his focus on the importance of listening to narratives about who we are and what we need to do to address unemployment within and beyond the boundaries of the nation state.

The Max-Neef Human Sustainability Index can be applied to valuing, measuring and managing environmental and human assets through considering our lives in terms of 'being, having, doing and interacting'. This index provides a possible architecture at each local government level to ensure that freedom of information, the right to a voice and a right to be heard is applied to the environmental wellbeing concerns of local residents. The engagement architecture that we could develop and test together enables diverse opinions to be mapped and scored in terms of social,

economic and environmental indicators of *what works why and how* to support personal and environmental wellbeing. These perceptions could help policy makers narrow the gap between haves, wants and needs when addressing education and training service delivery to address perceived areas of concern(Brook Lyndhurst,, 2004, McIntyre-Mills et al 2014).

The research via a community of practice could break new ground on understanding social and cultural relationships and power dynamics within local government regions within learning organisations and learning communities as they relate to wellbeing and environmental stewardship.

Public sector roles and functions have changed

According to Bourgon (2004) the challenge for the public sector is to shift from responding to a predictable social, economic and environmental context to being innovative and responsive. This is equally relevant for the private and non-government sectors. Compliance in terms of the rules of law now needs to consider reframing and recasting the future of democratic governance to take into account our increased vulnerability and interconnectedness.

Policy and governance outputs and outcomes need to be responsive; one size does not fit all in increasingly diverse nation states. Currently the challenge is that on the one hand the nation state is too big to address the needs of diverse voters and too small to address the collective needs and common good of people in regional areas facing food energy and water challenges that will need a multilevel and multiagency approach to ensure social and environmental justice within and beyond the boundaries of the nation state.

The theoretical perspective developed by Nussbaum (2006) in 'Frontiers of social justice' is applied to address complex challenges within and across boundaries in order to address quality of life and capabilities for all. My own reflection spanned social, economic and environmental considerations. Climate change is a significant problem in Australia. There is little doubt that accelerated climate change will adversely affect wellbeing and sustainability in Australia (Flannery, 2005, Pretty, 2013, Stigltz et al, 2010) – particularly if we continue to consume at current rates (Davies &World Institute, 2008 — resulting in significant devastation and a compromised quality of life. The impact of climate change has been underestimated (Lovelock, 2009, Rockström et al, 2009) and local solutions have been overlooked. Aboriginal cultures teach us about stewardship and relationships with the land, but these relationships have been lost in non-Aboriginal cultures. As Major Sumner, an Ngarrindjeri Aboriginal elder from the periodically drought-ravaged lower Murray River in South Australia and custodian of the river stresses, we are the land and the land is us. Re-establishing relationships with the land is at the heart of effective cultural ecosystem management and can be fostered through cultural ceremonies (see http://www.mdba.gov.au/what-we-do/working-with-others/aboriginal-communities/ringbalin).

There is evidence that many desire more environmentally sustainable lives, but little is known about the influences on choices around the management of land, water, food and energy supplies that affect the environment. Government responses to human wellbeing are often based on economic development, which inadvertently increases consumerism, resulting in greater environmental degradation and a heavier carbon footprint. The implementation of coal plants and the lack of local government support for green energy sources are a case in point for both Australia

and South Africa.

We know, therefore, that environmental sustainability and human wellbeing are intimately linked, but there is little knowledge about how this linkage can be built upon to improve both areas or how we can draw on the lived experience of people to create and co-create pathways to sustainable living through valuing different ways of living and sustainable knowledge that has stood the test of time. Attempts to address climate change are often based on policy information that is not grounded in people's experiences and fails to address what we do know about human behaviour or choices. How can we increase engagement in the environment that balances individual and collective wellbeing and simultaneously protects the environment when we know little about this nexus and when we do so little to provide opportunities for the recognition of prior learning and do not draw on cultural case studies of sustainable living?

Research needs to draw on diverse ways of knowing (Cruz et al, 2009) that could support regional governance (Wear, 2012) to support effective environmental management. There is evidence that many desire more environmentally sustainable lives, but little is known about the influences on choices around the management of land, water and food that affect the environment. Government response to human wellbeing is often based on economic development, which inadvertently increases consumerism, resulting in greater environmental degradation. We know, therefore, that environmental sustainability and human wellbeing are intimately linked, but there is little knowledge about how this linkage can be built upon to improve both areas through enhancing capacity building for sustainable living and sustainable employment.

Attempts to address climate change are often based on policy information that is not grounded in citizen experiences and fails to address what we do know about human behaviour or choices. The inherent link between engagement in civil society and community wellbeing (rather than profit) needs to be the focus of research.

The concepts of stewardship and resilience are important notions through which to explore the nexus across wellbeing, consumption choices and the environment. We need to develop a deeper understanding of how the intangible aspects of perceived wellbeing can be measured and how different kinds of knowledge can be applied to support social and environmental justice. But we also need to measure them in relation to the link between wellbeing and sustainability (Stiglitz et al (2010). Our conversation then explored the shared area of concern, namely that lived experience and alternative ways of knowing are not sufficiently appreciated.

The Ngarrindjeri care taker Major Sumner teaches that learning to appreciate water flows is based on years of experience of testing out ideas and drawing on the empiricism of learning from the land. But we need to also appreciate that non-anthropocentric care taking requires learning from narratives of what works, why and how. We need to 'join up the dots' and appreciate our interdependency on many forms of life.

Shiva (2011) for example stresses the need to learn from nature and from non-human animals. The wisdom of the earthworm to sustain organic material and the wisdom of the kangaroo, an environmentally evolved creature that suits the semi-arid environment and that fertilizes it with manure that sustains the bush on which it depends (Flannery, 2012). A post-colonial approach to

agriculture could recognize appropriate farming in Australia and South Africa and draw on the experiences of the people in living sustainably..

The ability to live sustainably will require valuing different ways of knowing, learning and experiences, such as the ability to be an entrepreneur and to have the skills to create artworks and functional items out of recycled material. The ability to mend and recycle has been forgotten in a consumerist world.

Thus the issue of creating barriers to university entry, rather than pathways needs to be explored widely. Best practice examples of not merely recognizing prior learning through competency tests set by the university or other colleges for vocational education have already been implemented in Australia. For example in Alice Springs the Centre for Desert Knowledge and CAT demonstrate working in partnership with Indigenous Australians.

Thus the notion of participatory action research with those who have experience could be a methodology for learning to live sustainably.

The group then explored specific questions that flowed from their engagement with our shared area of concern, namely the need to respond to the education, development and employment needs of South Africans through enabling learners to achieve pathways to sustainable living. Many of the issues faced by South Africans are issues faced by those in other parts of Africa. The droughts in Tunisia, for example has led to protests and the flow of asylum seekers to Europe. Many also seek asylum in South Africa from other parts of Africa.

In Australia the social contract protects those within the boundaries of the state but not those who seek asylum from elsewhere. The issue of bounded governance and decision making that does not consider the consequences of social, economic and environmental choices for our neighbours has been raised by Joy Murray in the so-called Tuvalu test that demonstrates how our social economic choices affect our neighbours through rising sea levels. For example in Samoa, agriculture has been affected by rising sea levels and increased levels of salinity.

Thus the issue of employment and unemployment is one that needs to be placed within the context of the environment of the problem. Namely a sustainable future in which learning supports social, economic and environmental wellbeing.

After sharing my own concerns about the implications for climate change locally and regionally and showing the interconnectedness of social, economic and environmental considerations by means of a soft systems map which I reproduce below as follows, each participant was asked to raise their own areas of concern.

Cosmopolitan area of concern

The excessive consumption of energy resources impacts on the size of our carbon footprint (defined in terms of the Intergovernmental Panel on Climate Change (IPCC) IPCC formula, namely E (Emissions) = Population X Consumption per person X Energy Efficiency X Energy Emissions) The IPCC formula suggests that the privileged lives of some could lead to 'existential

risk' for all forms of life on the planet (Bostrom, 2011). The 'price of inequality' – national and global has escalated. The global figure for displaced people passed 50 million for first time since the Second World War. The processing of asylum seekers offshore has become a human security risk for Australia, because compassion has been set aside in a bid to win votes by stressing border protection. The needs of the displaced are not addressed through the current architectures of democracy and governance.

My research question is: how should we live? How can we be more sustainable in our living choices? My research tests the hypothesis that decisions that are made at the lowest level possible are more likely to take into account the complexity of the decision maker (Flood and Carson, 2003)..

My area of concern is to address complex challenges. Complexity refers to the number and variety of variables that need to be considered and their relationships and the way in which they are valued by the different stakeholders. When doing research it is important to think in terms of both the big picture (context of the area of concern) and the small picture (perceptions of the different stakeholders). I am particularly concerned to think about what is included and excluded when I frame or conceptualize research. This involves more than merely reading the literature, thinking about different perspectives and the implications for the way in which the research is designed, it requires an approach that is grounded in awareness of many different ways of knowing drawing on many senses and based on a realization that learning from the environment is important. The way an issue is conceptualized shapes the design and whether qualitative and or quantitative data are collected. In order to enhance representation and accountability (which are essential for ethics, democracy and governance) the testing out of ideas locally , regionally , nationally and in post national regions becomes increasingly important to address complex wicked challenges of poverty and climate change in a world where the gaps between rich and poor are becoming wider. Monitoring from below to ensure accountability and representation is increasingly important, given the panoptican tendencies of digital technology.This has implications for using digital media to foster communities of practice that support social and environmental justice by pooling resources (see Wenger 1998).

To sum up my concern is the need for a different approach to the way in which we live our lives in terms of our consumption of energy resources, fresh water, transport and meat consumption and the implications for wellbeing and sustainable living (Pretty (2013).

Developing a greater number of connections enhances consciousness. Greenfield (2000, 2008) argues that the more we are able to think about our thinking the more conscious or mindful we become. This can help to create closer bonds and links as well as the capacity to bridge differences.

The research is located at the interface of capacity building, knowledge and biodiversity management, consciousness studies and systemic governance (McIntyre-Mills, 2006, 2010, 2014) and contributes to new ways to address the systemic social, economic and environmental challenges we face today. It brings together multiple areas looking for new solutions. The challenge is to learn to work with diversity and power (Flood and Romm, 1996) and to develop

new forms of knowledge (Gibbons et al, 1994). Wellbeing is now widely located in mainstream trans disciplinary literature that re-frames what we value as a society, hence my research builds on the work of Joseph Stiglitz, Amartya Sen, Ann Florini, Danielle Archibugi , Yoland Wadsworth, Deborah Rose Bird, Mike Hulme, Carol Graham and Jenneth Parker of the Schumacher Institute, for example. The participatory action research explores whether the proposed architecture for engagement in participatory democracy and governance (Archibugi, 2010) could enable people to gain greater awareness of the implications of excessive consumption (Pretty, 2012, Urry, 2010) for stewardship (see Australian Gov. Caring for Country, 2013-2018). The specific challenge that this research addresses is to match forms of appropriate stewardship participation (Irwin and Stansbury, 2002, Jasonoff, 2003) that are accessible to diverse groups and not viewed with cynicism (Cooke, 2004). Significantly the research will assess whether participatory democracy and governance enhance sustainable living and wellbeing.

The metaphor of weaving together strands of experience and creating a community of practice

Indigenous Ngarrindjeri knowledge is based on understanding that river grasses enable the salinity to be drawn out of the soil to avoid toxicity during when the river levels are low. The metaphor of weaving together strands of experience through weaving artistic and functional objects such as mats, baskets and art works whist engaging in telling narratives about the dreaming and about current community rights and responsibilities enables people to think about self-others the environment including the next generation of life.

Co-determination within Biospheres: Rethinking architectures of democracy and governance based on the pillars of morality: empathy and reciprocity

The tendency to think in terms of specific disciplines rather than with respect for other ways of thinking has resulted in so-called 'enlightened' , ethnocentric and anthropocentric thinking and practice that has led to policies that have affected the quality of agriculture and water management. My area of concern is to introduce a more responsive and open, transdisciplinary and cross cultural approach to policy making and policy implementation. Instead of making decisions in a top down manner we need to practice monitory democracy from below so that decisions match the needs of local people.

In Australia the gap between rich and poor has widened. The price of inequality is born by people and the environment. Most importantly the current social contract does not go far enough to protect the needs of non-citizens, namely young people, asylum seekers as well as the voiceless who are unable to express their needs.

The social contract extends rights and expects responsibilities to be fulfilled in return. But what about those who are voiceless, disabled, too young or without citizenship rights (displaced, asylum seekers or refugees)? (Carens, 1995, Nussbaum, 2006, Young, 2000).

In order to address this area of concern it is necessary to with a range of different theories spanning disciplines and to take inspiration from trans disciplinarity as well as cross cultural inspiration on cultural flows. Stanford research on non-anthropocentric approaches to fairness and unfairness shows that primates and other animals understand the concept of the fair distribution of resources

and that a sense of morality and reciprocity guides the behavior of primates and other animals (including human animals). I also draw on Frans De Waal who stresses the need to recognise that we evolved not only through our ability to compete but through our ability to co-operate and to show empathy to others.

Frans De Waal (2009) stresses that morality, empathy and co-operation provided a basis for evolution, not only competition. Surely it is time to re-think the social contract which is far too narrowly defined to protect only human animals living within the boundaries of the nation state? Shiva argues that the greatest misuse of natural resources has been by nations and corporations and not by local communities that have acted as water democracies, for example in Bali, Indonesia and in Gujrat, India – water was sacred and carefully managed.

> "Community rights are necessary for both ecology and democracy. Bureaucratic control by distant and external agencies and markets control by commercial interests and corporations [can] create disincentives for conservation…" (Shiva, 2002: 30-31).

I explained that the use of water could be used as a synecdoche for discussing participatory governance and democracy. In South Australia the flow of water has been affected by the introduction of dams and weirs. The upstream users benefit at the expense of down steam users, but this has been raised as a problem by Major Sumner, an Ngarrindjeri caretaker who has stressed that we need to think in terms of cultural flows. This means that our thinking and practice needs to be carefully considered so that we consider the consequences of our policy decisions for ourselves, others and the environment.

Critical systems thinking deals with complex wicked problems which comprise many diverse and interrelated variables which are perceived differently by different stakeholders with different values. Thus two examples of wicked problems are climate change, poverty that pertains to our rights and responsibilities to both citizens and non-citizens. The role of theory and its relationship to practice needs to be carefully considered in terms of policy and praxis.

Table 1: Debunking Containerist Approaches

	Structure	Process	Action
Micro-level Individuals	Aarhus convention (1998)	Questions raised and posed to local government by individuals	Local government, NGOS and individuals
Meso States and regions	Aarhus convention Linked to Global Covenant	On line monitory democracy and governance to address state/market/civil society concern	Networking NGOs and INGOS to address representation and account ability
Macro Cosmopolitan governance	Legal structures to support the Global Covenant, Aarhus convention and Biospheres Convention	International law to support social and environmental justice	Global action to pass laws in overlapping biospheres

Participatory Educational Research (PER)

Source: Adapted from Archibugi (in Wallace Brown and Held, 2010: 322 cited in McIntyre-Mills 2014, p129 as Architecture for cosmopolitan democracy in overlapping domains.

Areas of concern raised by participants and specific research questions raised by members of the group in the next iteration of the conversation

Akwasi Arko-Achemfuor raised the issue that unemployment is a major concern in South Africa and that training does not match the needs of those who need to achieve qualifications to earn a living. Recognition of prior learning needs to be given more attention. UNISA uses the rhetoric but does not apply it in practice. Alternative processes and pathways to learning opportunities need to be constructed that honour diverse kinds of knowledge and diverse ways of learning. Whilst competency based approaches to the assessment of prior learning were previously developed at UNISA that more could be done to apply this policy in practice through combining it with action learning processes and participatory action research approaches that develop communities of practice to address specific tasks through creating networks of reciprocity within and beyond the boundaries of the university to create learning communities (see Senge,1994) on learning organisations and learning communities) with people in rural and urban contexts. The distance learning approach used at UNISA could help to foster support after the establishment of face to face communication on development opportunities. Partnerships could be explored with NGOs, the Public and Private sector to provide development opportunities that build on the social, cultural, economic and environmental know how.

Pinkie Mabunda stressed that her concerns dovetailed with those of Akwasi and that she believed there was a need to enable prior learning to be recognized and to re-establish some of the processes that had previously existed to ensure that pathways for learners are facilitated by matching responses to needs. Against the background of social transformation, experiential learning and practices of RPL have been evolving within the contemporary discourse of lifelong learning, in a context which includes flexible forms of educational provision, credit transfer frameworks, competence and work-based learning (WBL) (Pouget and Osborne 2004). Recognizing prior learning (RPL) is key to the agenda of widening participation of learners who have gained qualifications, expertise and/or entry to programmes using skills and experience gained informally and experientially from varying learning context (Scott 2010). Many researchers argue that through RPL domination of formal education as the learning context is challenged and new possibilities are presented for identifying, recognizing, assessing and valuing experiential learning, knowledge and skills (Gross 2005). In the context of South Africa, the development of RPL policies is also considered as a key contributor to the discourse of the social inclusion of historically marginalized groups (Michelson 1997; Harris 1999). Their research question is: how can prior learning be enhanced? What success stories can we draw on locally and what lessons can we learn locally and from elsewhere?

Kedibone Mokwena expressed concern about the need to provide opportunities for people living in urban and rural areas through engaging in participatory action research on entrepreneurial activity to make use of lived experience in surviving and making use of resources to create something out of nothing through bricolage or the creative use of found objects to be transformed into art works or functional objects. Her question is what works why and how? Participatory action research with rural and urban entrepreneurs could explore case studies of innovation and provide lessons for policy to support opportunities for entrepreneurs using recycled materials.

Mokwena suggests developing a model of Vocational Education and Training (VET) for unemployed rural women in Winterveldt outside Pretoria. Unemployment is one of the major problems facing the contemporary world, especially in the so called third world.   According to Blossfeld (1992) women are internationally regarded as the main driving force for household survival, economic growth and the alleviation of poverty in rural areas. Unfortunately in the developing world most women have no skills for employment. Barker (2003: 174) argues that an unemployed person is a person who is without work, is currently available for work particularly the developing world. About 130 million young people in developing countries (15-24 years) are classified as 'illiterate' with women representing 59 per cent (UNESCO 2008). Illiterate adults face serious employability issues, given their low level of knowledge and expertise. In India for an example, the major cause of unemployment is the slow pace of development. South Africa, a developing country is also experiencing these challenges, unemployment being conceivably the root cause of many other problems, such as high crime rates, violence, and abject poverty. Blacks were severely repressed under apartheid and may not have developed the entrepreneurial and social skills necessary to enter and be successful in self-employment ventures. As a result the South African government has put in place policies and programmes aimed at reducing the rate of unemployment in the country. The relevance of VET for this study may be traced back to the introduction of the Skills Development Act (SDA) No 97 of 1998, the passing and implementation of the Adult Basic Education and Training (ABET) policy 52 of 2000 in South Africa which advocate for recognition of formal, informal and non-formal education in an integrated education and training approach as well as the White Paper for Post-School Education and Training (2013) which embraces the concept of lifelong learning affirming that learning occurs throughout a person's life in many forms(see Butler with Taylor, 2009 . These Acts together with other legislation on VET are some of the policies which were implemented by the South African government with the goal of enhancing employment opportunities for adults particularly women who in this study are the chief economic providers responsible for maintaining the household.

This research will be conducted in the Winterveldt area situated forty kilometres North West of Pretoria. It is made up of several villages where people live in mostly informal housing comprising corrugated tin huts. Adults and in particular women are without any form of employment because of lack of skills (see Davids et al, 2005:25). Without basic education and training, rural Black illiterate women could remain cut off from the social, economic and political activities of the country (Quan Baffour (2012: 91).

The main research question for this study will be: What could a model of vocational education and training for unemployed rural women look like and how could it be developed?   The concept Vocational Education and Training is used interchangeably by different scholars. This study is underpinned by the transformational paradigm which argues that social reality is historically bound and is constantly changing depending on social, cultural and power-based factors (Freire, 2007). As a study located in Freirean theory of dialogue it will employ a qualitative research design using action research where participants will talk about themselves and situations.   The study seeks to develop an appropriate model of vocational education and training for unemployed rural women. In order to achieve the stated aim, the study sets out to:

- Establish unemployed women's specific needs for vocational education and training.

- Identify a) current vocational education and training practices and to come up with a model appropriate to unemployed rural women. b) Strategies that can be adopted in developing a model of vocational education and training for unemployed rural women. c) Factors and intervention mechanisms that can be used to achieve positive results in the development of a model of vocational education and training.

- Determine how a model of vocational education and training can contribute to the enhancement of employment opportunities for rural women.

Esther Njiro expressed her interest in fostering more opportunities to facilitate learning through using distance learning digital technology more inclusively and creatively to enhance pathways for learning. Her interest is in responding to the diverse needs of distance learners who may have limited connectivity.

Her points raised the concern that technology is a means to an end that may be used to include or exclude, depending on the level of digital know how. Many different ways of knowing need to be appreciated in order to empower learners to develop their capacity and to progress on a pathway to social, economic and environmental wellbeing.

Participatory or collaborative learning using computer supported technology involves everyone in identifying their learning needs and opportunities and in the actions required to address them challenging the conventional biased preconceptions about people's knowledge and methods of acquiring knowledge (Albert and Campbell, 2008). The participation metaphor is characteristic of how, using social software tools, learners engage in the processes of social interaction, dialogue and sharing, all of which are linked to socio-cultural theory (Lave & Wenger, 1991; Vygotsky, 1978). However, learners are also capable of creating and generating ideas, concepts and knowledge, and the ultimate goal of learning in the knowledge age is to enable this form of creativity. Current views of learning regard the notion of a teacher-dominated classroom and curriculum as obsolete, and embrace learning environments and approaches where students take control of their own learning, make connections with peers, and produce new insights and ideas through inquiry (McLoughlin and Lee, (2007). Thus, to keep pace with the content creation processes enabled by Web 2.0 and social software, it appears to be necessary to go beyond the acquisition and participation dichotomy. Paavola and Hakkarainen (2005) propose the knowledge creation metaphor of learning, which builds on common elements of Bereiter's (2002) theory of knowledge building, Engeström's (1987; 1999) theory of expansive learning, and Nonaka and Takeuchi's (1995) model of knowledge creation. Mishra and Jain (2002) demonstrate instructional approaches for behaviourism, cognitivism and constructivism learning theories. These participatory approaches include visualization, games, interviewing, group work, and segmenting course content for flexibility in learning (see International Institute for Environment and Development, 2005). To sum up, learner centred education needs to be about self-reflection, be flexible, responsive, connected and relevant to current challenges (Clegg and Heap, 2006, Gadamar, 2001, McLoughlin and Lee, 2007, Strijbos et al., 2004, Weller, 2000).

Norma Romm stressed that her area of concern is on teaching and research methodology and ways in which learning is facilitated. Norma played the role of observer and documented the process and content of the workshop.

Developing an alternative vision for education and employment

Through striving to reveal 'in the small new ways of seeing the whole' (Adelman, 2013, 9) we could co-create new ways of engaging adults and young people in learning for a sustainable South Africa. This could provide lessons for cosmopolitan approaches to re-discovering ways to live through recycling and using resources creatively. It could also foster a sense of stewardship rights and responsibilities (Flannery, 2012) that are translated into new approaches to economics and business. Where success is valued not in terms of growth and profit, but in terms of distribution and living sustainably by valuing quality of life supported by:

- Socially inclusive communities in which people feel safe, appreciated, respected and happy and in which they are accountable for the governance of sustainable resources (see Florini, 2003, Graham,2011)
- Economically sustainable communities where people work and live in ways that create and re-create an environment that will continue to support the current and future generations through caring for food, energy and water supplies.
- This community of practice research initiative is significant in so far as it contributes to developing insight and foresight into many different ways of knowing and the importance of appreciating diversity in the tertiary education and training sector. It needs to strive to foster and provide pathways for diverse forms of knowledge including '*verbal, visual, physical, musical, mathematical, introspective and interpersonal*' (Bounfour and Edvinssen, 2005, Gardner, 2008) and thus develop human capacity to address complex socio-environmental challenges (Ehrlich and Ehrlich, 2013).
- Democracy and governance are in need of improvement (Hulme, 2009, Giddens, 2009) and lessons learned about sustainable living could help to revitalize our approaches to ethics, representation and accountability.
- It seems to me that diverse ways of knowing hold the key to human and environmental security.
- The argument developed in "Systemic Ethics" is that the containerist approach to science, democracy, ethics and governance is a core part of the problem. This book stresses that the social contract is far too narrow to protect the more than 50 million displaced people who are non-citizens and thus considered to be outside the frame of reference of state protection. The enclosure acts based on Hardin's paper and Locke's argument based on the notion of the Tragedy of the Commons is part of the problem. As detailed below there is no research to support this argument.
- Current challenges today such as social, economic and environmental issues associated with growing numbers of displaced people , poverty, conflict, food insecurity as a result of shrinking agricultural land , water shortages , growing urbanization, energy shortages associated with using non-renewables , nuclear disasters on the scale of Fukushima are examples raised by the United Nations and Vandana Shiva and Maude Barlow. The issues need a new approach to the architectures of governance on a planetary scale. This book explores ways of doing things differently.
- The best practice examples can be found in many contexts from the survival strategies in informal housing areas to the declaration of rights to nature in Bolivia, Peru and Ecuador.

The lived experience of Ubuntu in Africa and a sense of connection with nature in South American nations provide some telling directions for the future.

Conclusion: our goal is to work across boundaries through co-creating a community of practice to address a shared concern

Finding ways to link with local government and local NGOs to foster employment opportunities is important. We proposed an approach to working across boundaries as being as relevant to education as it is to community development. The process could help to enhance representation and accountability through exploring ideas and engaging in dialogue by testing the implications of decisions with others so as to balance individual needs and collective needs for a more sustainable way of life.

References

Aarhus Convention (1998). 'On access to information. Public participation and access to justice in environmental matters', Denmark,25June.http://aarhusclearinghouse.unece.org/resources.cfm?c=1000069

Akomfrah, J. (2013). 'The Stuart Hall Project. Documentary', produced by David Lawson & Lina Gopaul and directed by John Akomfrah.

Albert, S & Campbell (2008). '*The Challenge of Participatory Technologies for Teaching and Learning at Ontario Universities'*. In Jennie Piekos, Research Associate Council of Ontario Universities. Retrieved from www.cou.on.ca/.../the-challenge-of-participatory-technologies-for-t

Archibugi, D. (2008). '*The architecture of cosmopolitan democracy'* in The Global Commonwealth of Citizens: Towards Cosmopolitan Democracy. Princeton University Press.

Australian Public Service Commission (2007). '*Tackling Wicked* Problems: A Public Policy Perspective'. *Australian Public Service,* Canberra.

Barker, R. L. (2003). '*The social work dictionary'*, 5th Ed. Washington, DC: National Association of Social Workers Press

Bateson, G., (1972). '*Steps to an Ecology of Mind',* Ballantine, New York.

Bausch, K. 2006, 'Be your enemy: The Contributions of West Churchman to Doing Better Governance and International Relations' In McIntyre-Mills, J. *Rescuing the Enlightenment from Itself: Critical and Systemic Implications for Democracy,* C. West Churchman Series, Vol. 1, Springer, New York, Boston, London.

Beck, U. (2010). 'Climate for change, or how to create a green modernity'. *Theory, Culture and Society*. 27(2-3):254-266

Beck, U. and Sznaider, N. (2006). 'Unpacking cosmopolitanism for the social sciences: a research agenda' *The British Journal of Sociology* 57.1-23.

Beer, S. (1974). '*Designing Freedom'*, Wiley, London.

Bereiter, C. (2002). '*Education and mind in the knowledge age'*. Hillsdale, NJ: Erlbaum.

Berlin, I. (1958). 'Two Concepts of Liberty.' In Isaiah Berlin (1969) *Four Essays on Liberty*. Oxford University Press, Oxford.

Bird, J. and Clarke, S. (2000). 'Racism, hatred and discrimination'. J. *of Psycho-Analysis of Culture and Society*. 4 (2): 332-335.

Blossfeld, H (1992). 'Is the German dual system a model for a modern vocational training system? A cross-national comparison of how different systems of vocational training deal with the changing occupational structure', *International Journal of Comparative Sociology* 23: 168 - 81.

Boettcher, J. V. (2007). 'Ten Core Principles for Designing Effective Learning Environments: Insights from Brain Research and Pedagogical Theory'. Innovate: *Journal of Online Education.* Retrieved from www.innovateonline.info/index.php?view=article&id=54

Bonanno, G. (2004). 'Loss Trauma, and Human Resilience'. *American Psychologist* 59: (1) 20-28.

Borradori, G. (2003). '*Philosophy in a time of terror. Dialogues with Habermas and Derrida'*. Uni of Chicago Press.

Bostrom, N. (2011). 'Existential risk prevention as the most important task for humanity' Faculty of Philosophy & Oxford Martin School University of Oxford www.existential-risk.org

Boulding, K. (1956). 'General Systems Theory – the skeleton of Science' *Management Science*. 2, 197-208.

Bourdieu, P. (1999). '*The weight of the world. Social suffering in contemporary society'*. Cambridge. Polity.

Brook Lyndhurst, (2004). 'Liveability and sustainable development'. Final Report for ODPM, London.

Brundtland, G. 1987, http://www.worldinbalance.net/agreements/1987-brundtland.html *The report "Our Common Future*".

Burns, D. (2007). '*Systemic Action Research. A Strategy for whole system change'*. Bristol. Policy Press.

Butler, J. with Taylor, S. (2009). '*Interdependence'. In Taylor, A 2009. *Examined Life: excursions with contemporary thinkers*. The New Press. New York.

Capra, F. (1996). '*The web of life: A new synthesis of mind and matter'*, Harper Collins.

Carens, J. (1995). 'Aliens and Citizens: the case for open borders', In *The rights of Minority cultures*, Ed Kymlicka, W. Oxford. Oxford University Press.

Carspecken, P.F. (2014). '*Critical Ethnography in Educational Research'*. Routledge. New York

Christakis, A. (2006). 'A retrospective Structural Inquiry into the predicament of Humankind: Prospectus of the Club of Rome'. In McIntyre-Mills, J. Ed. *Rescuing the Enlightenment from Itself. Critical and Systemic Implications of Democracy*, Volume 1 of the 'C. West Churchman and Related Works Series', Van Gigch, J (series editor), Springer, London.

Christakis, A. and Flanagan, T. (2010). '*The talking point: A collaboration project of 21st Century Agoras'*. Information Age Publishing.

Churchman, C. West, (1982). '*Thought and Wisdom'*, Californian. Intersystems Publications.

Churchman, C. West., (1971). '*The Design of Inquiring Systems'*. New York. Basic Books.

Churchman, C. West., (1979). '*The Systems Approach and its Enemies'*. New York. Basic Books.

Clegg, Phil and Heap, J. (2006). 'Facing the Challenge of E-Learning: Reflections on Teaching Evidence-Based Practice through Online Discussion Groups'. *Innovate: Journal of Online Education*. September 2006. www.innovateonline.info/index.php?view=article&id=290

Cobbett, E. and Germain, R, (2012). 'Occupy Wall Street' and IPE: Insights and Implications *Journal of Critical Globalisation* Studies, Issue 5: 110-113.

Collins. R. (2010). 'Geopolitical conditions of internationalism, human rights and world law'. *Journal of Globalisation Studies*. (1): 29-45.

Comaroff, J. (2011). 'Theory from the South: or how Europe is evolving towards Africa'. Key note address at Knowledge and value in a Globalising world. Disentangling dichotomies, querying unities. University of Western Australia. Perth 5-5th July.

Cooke, B. (2004). '*Rules of thumb for participatory change agents Participation: From Tyranny to transformation*?' New York. Zed Books.

Crossen, T. and Niessen, V. (2007), NGO standing in the European Court of Justice - Does the Aarhus Regulation Open the Door? RECEIL 16 (3) 332-338. ISSN 09628797 at 332.

Crush, J. and Fayne, B. (2010). 'Pathways *to Insecurity: Urban Food Supply and Access in Southern African Cities'*, Urban Food Supply and Access in Southern African Cities African Food Security Urban Network, 2010.

Cruz, I. Stahel, A. Max-Neef, M. (2009). 'Towards a systemic development approach' *Ecological Economics*, 68, 2021-2030

Davies, JB., and World Institute (2008). '*Personal wealth'*. Oxford University Press.

De Waal, F. 2009, '*The Age of Empathy nature's lessons for a kinder society'*. Harmony.

Ehrlich, P and Ehrlich, A. (2013). 'Can a collapse of global civilization be avoided?' *Proc of the Royal Society of Biological Sci. Sep 22, 2013; 280(1767): 20131193*.

Elliot, A. and Urry. J. (2010). '*Mobile Lives'*. Routledge, New York.

Faist, T. (2009). 'The transnational social question'. *International Sociology*. 24: 17-36.

Fischer & Konomi, 2005 Fischer, G. & Konomi, S. (2005). ‚Innovative media in support of distributed intelligence and lifelong learning'. In *Proceedings of the Third IEEE International Workshop on Wireless and Mobile Technologies in Education* (3-10). Los Alamitos, CA: IEEE Computer Society.

Flanagan, T. and Bausch, K. (2011). '*A democratic approach to sustainable futures. A workbook for addressing the global problematique'*. Ongoing Emergence Press. Riverdale.

Flannery, T, (2012). 'After the Future: Australia's New Extinction Crisis'. *Quarterly Essay* Issue 48.

Flannery, T. (2005). '*The weather makers. The history and future impact of climate change'.* Text Publishing, Melbourne.

Flannery, T. (2010). '*Here on earth. An argument for hope'.* Text Publishing. Melbourne

Flood, R. & Carson, E. (1993). '*Dealing with Complexity: An Introduction to the Theory and application of Systems Science'*, 2nd. ed., Plenum, London.

Flood, R. & Romm, N. (1996). *'Diversity management: triple loop learning'*, Wiley, Chichester.

Florini, A., (2003). '*The Coming Democracy'*. Island Press, Washington DC.

Folke, C. (2006). 'Resilience: The emergence of a perspective for social-ecological systems analyses'. *Global Environmental Change* 16 253-267.

Follesdal, A. (2006). 'Subsidiarity, democracy and human rights in Europe'. J of Social Philosophy.37 (1):61-80.

Foucault, M. and Gordon, C.(1980).Eds, '*Power/Knowledge'*. Harvester.Brighton.

Fourade, M. And Savelsburg, J. (2006). 'Global Processes, National Institutions, Local Bricolage: shaping law in an era of globalisation'. *Law and Social Inquiry*. 31(3):515-519.

Freire, P. (1970). 'Adult Literacy Process as Cultural Action for Freedom'. 1970. *Harvard Educational Review*. 40(2), Summer 1970 http://hepg.metapress.com/content/121179/?p=a88f9f08136c4c20b50fbc74adcd18c7&pi=0

Freire, P. (1982). "Creating alternative research methods. Learning to do it by doing it", in Hall, B., Gillette, A. and R. Tandon (eds.) *Creating Knowledge: A Monopoly*. Society for Participatory Research in Asia, New Delhi, pp. 29–37.

Freire, P. (2007). '*Pedagogy of the oppressed'*. New York: Continuum.

Friere, P. (1985). '*The politics of education',* Begin and Garvey, Inc. Westport, CT 06881

Gardner, H. (2008). '*Multiple intelligences: new horizons in theory and practice'*. New York Basic Books

Gadamar, H.G. (2001). 'Education is self-education' *Journal of Philosophy of Education*. Vol. 35 No 4.

Gallhofer, S. & Chew, A. (2000). 'Introduction: accounting and indigenous peoples', *Accounting, Auditing and Accountability Journal*, 13(3):256-267.

Galtung, J. (1990). 'Cultural Violence', *Journal of Peace Research*, Vol. 27. No 3. 291-305. Sage.

Gamble, A. (2000). 'Economic Governance' In Pierre, J. Ed. '*Debating governance: authority, steering and democracy'*. 1st edition Oxford University Press, Oxford.

Gandhi, L. (1966). Affective *communities: anti-colonial thought, fin-de-siècle radicalism and the politics of friendship*, Duke University Press.

Gaventa, J. (2001). 'Global Citizen Action: Lessons and Challenges' In Edwards, M. and Gaventa, J. eds. *Global Citizen Action*. Lynne Rienner.Boulder.

Getano Lui, (1993). '*Voices from the Land'*. Boyer lecture Series.

Gibbons, M. Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. & Trow, M. (1994). '*The New Production of Knowledge: The dynamics of Science and Research in Contemporary Societies'*, London. Sage.

Giddens, A. (2009). '*The politics of climate change'*. Polity. Cambridge

Goldsmith, J. and Posner, E. (2005). '*The limits of International Law'*. Oxford: Oxford University Press.

Gould, C. (2007). 'Transnational Solidarities' *Journal of Social Philosophy*, 38(1), 148-164.

Gouldner, A.W. (1971). '*The Coming Crisis of Western Sociology'*. London. Heinemann.

Graham, C. (2011). '*The pursuit of happiness: an economy of well-being'*. Brookings Institution Press. Washington.

Greenberg, G. & Tobach. (1987), '*Cognition, language and consciousness: integrative levels'*, Vol. 2. Hillsdale New Jersey.

Greenfield, S. (2000). *The private life of the brain: emotions, consciousness and the secret of the self*. Wiley. New York

Greenfield, (2003). *Tomorrow's People How 21st Century Technology is changing the way we think and feel*. Penguin

Greenfield, S. (2008). *ID: The quest for meaning in the 21st century*. Sceptre, Hodder and Stoughton, London.

Gunaratne, S.A. (2009). 'Globalization: a Non Western perspective: the bias of social science/communication oligopoly'. *Communication, Culture and Critique* (2) 60-82.

Habermas, J. Derrida, J and Borradori, G. (2003). '*Philosophy in a time of terror Dialogues with Jurgen Habermas and Jacques Derrida'*. University of Chicago Press.

Habermas, J., (1984). '*The theory of communicative action'*. Beacon: Boston.

Hall, B and Tandon, R (2014). 'No more enclosures: knowledge democracy and social transformation' *Open Democracy* https://www.opendemocracy.net/author/rajesh-tandon, Open Democracy 20 August 2014

Hardin, G. (1968). 'The Tragedy of the Commons', *Science,* 162:1243-1248.

Harris, L.D. and Wasilewski, J. 2004, 'Indigenous Wisdom of the People's Forum', *Systems Research and Behavioural Science*, Vol. 21:505-514.

Harrison, K. (2002). 'Policy perspectives: Social Capital'. In Parnell, S. Swilling, M and Wooldridge, D. *Democratising local government*. The South African experiment. University of Cape Town Press. Landsdowne.

Hayden, P. (2010). 'The environment, global justice and world environmental citizenship'. In Brown, G.W. and Held, D. *Cosmopolitanism,* Polity Cambridge

Held, D. et al. (2005). '*Debating Globalization'*. Polity Cambridge.

Held, D.(2004). '*Global covenant: The social democratic alternative to the Washington Consensus'*. Polity.

Heller, P. (2001). 'Moving the state: the politics of democratic decentralisation in Kerela, South Africa, and Porto Alegra'. *Politics and Society*, Vol. 29 No 1 131-163

Heycox, J., Meadows, P. and Vernon, B. (1997). 'Measuring environmental expenditures and revenues in Local Government', Environment and Energy Statistics Section Australian Bureau of Statistics, Australian Centre for Regional & Local Government Studies Working Paper No 2. University of Canberra

Hickey, S. and Mohan, G. (Eds) (2004). '*Participation: From tyranny to transformation*?' Zed Books. New York.

Hil, R.(2013). 'Beyond the cyber cell' In *Advocate,* Vol. 20, No 3. Pp28-29

Hill Collins, P. (2000). Black *Feminist Thought: Knowledge, Consciousness and the politics of Empowerment.* Routledge. New York.

Hulme, M. (2010). 'Cosmopolitan Climates. Hybridity, Foresight and meaning'. *Theory, Culture and Society.* Vol. 27 (2-3): 267-276.

Hulme, M. (2011). 'Climate Change and four narratives of growth'. AHTC Workshop. University of Cambridge. http://climatehistories.innerasiaresearch.org/wp-content/uploads/2011/01/Mike-Hulme.pdf. Accessed 8 Feb 2011.

Human Sciences Research Council, (2013). 'South African national health and nutrition examination survey' (SANHANES-1) Published by HSRC Press, Private Bag X9182, Cape Town, 8000, South Africa,www.hsrcpress.ac.za,First published: Launch edition 2013,Second edition published 2014

International Commission on the Future of Food and Agriculture (2007). '*Manifesto on the future of seeds'* www.future-food.org

International Institute for Environment and Development (2005).Participatory Learning and Action. Retrieved December 4, 2007 from www.iied.org/NR/agbioliv/pla_notes/about.html#b

Irvin, R.Stansbury, J.(2002). Citizen participation in decision making. *Public Administrative Review*.64:1:55-65.

Jasonoff, S. (2003). 'Technologies of humility: citizen participation' in governing science. Minerva. 41:223-44.

Jessop, S. (2009). 'Children's participation: an Arendtian criticism'. *Educational Philosophy and Theory.* Vol. 43. No 9 Article first published online: 8 NOV 2009 DOI: 10.1111/j.1469-5812.2009.00560.x.

Keane, J. (2009). *The life and death of democracy*. Simon and Schuster. London.

Kirby, M. (2013). *What would Ghandi do*? Penguin: New York

Knowles, M. (1978). *The Adult Learner: A Neglected Species* 2nd ed. Houston. Gulf Publishing Company.

Lave, J. & Wenger, E. (1991). '*Situated learning: legitimate peripheral participation'*. Cambridge, England: Cambridge University Press

Levin, S. (2006). 'Learning to live in a global commons: socioeconomic challenges for a sustainable environment'. *Ecological Research* 21:328-333.

Lovelock, J. (2009). *The Vanishing Face of Gaia*. Allen Lane.

Maloney, W. Jordan, G. and McLaughlin, A. (1994). 'Interest Groups and Public Policy' *J of Public Policy*, 14: 17-38

Mangcu, X (2014). '*The arrogance of power: South Africa's leadership meltdown'*. Tafelburg. Cape Town

Marr, B. 2005.*Perspectives on Intellectual Capital. Multidisciplinary insights into management, measurement and reporting*. Elsevier,

Max-Neef, M. 1991.*Human Scale Development*. Apex. London.

McIntyre-Mills, J. (2006b). '*Systemic Governance and Accountability: working and re-working the conceptual and spatial boundaries of international relations and governance'.* Volume 3 of the 'C. West Churchman and Related Works Series', Springer, London.

McIntyre-Mills, J (2010). 'Wellbeing, mindfulness and the global commons'. *Journal of Consciousness Studies*. 17, (7–8) 44–72.

McIntyre-Mills, J (2014). 'Systemic ethics and non-anthropocentric stewardship: *Implications for transdisciplinarity and cosmopolitan politics Springer, New York* .

McIntyre-Mills, J with Devries, D and Binchai, N. (2014). '*Wall Street to Wellbeing*: *Joining up the dots through participatory democracy and governance to mitigate the causes and adapt to the effects of climate change*:' Springer, New York.

McKay, V. and Romm, N. (1992). *People's Education in Theoretical Perspective.* Mascew Miller. Cape Town.

McLoughlin, C. & Lee, M.J.W. (2007). Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era. In Proceedings ascilite, Singapore pp 664-675. Retrieved from http://www.ascilite.org.au/conferences/singapore07/procs/mcloughlin.pdf

Midgley, G. (2000). *Systemic Intervention: Philosophy, Methodology, and Practice*. Kluwer. New York.

Mishra & Jain (2002) . Designing an Online Learning Environment for Participatory Management of Displacement, Resettlement and Rehabilitation. Retrieved from www.col.org/pcf2/papers/mishra.pdf

Murray, J. Dey, C. and Lenzen, M. (2007). 'Systems for Social Sustainability: Global Connectedness and the Tuvalu Test'. *Cybernetics and Human Knowing*. 14 (1): 87-105.

Nazarea, V. (2006). 'Local knowledge and memory in biodiversity conservation', *Annual Review of Anthropology*. 36.pp 317-335.

Nonaka, I. & Takeuchi, H. (1995). The knowledge-creating company: how Japanese companies create the dynamics of innovation. New York: Oxford University Press.

Nussbaum, M. & Glover, J. (1995). *Women, Culture and Development: A study of Human Capabilities. Oxford*. Clarendon Press

Nussbaum, M., (2006). '*Frontiers of justice'*, London. Harvard University

Oliver, R. (1999) Exploring strategies for online teaching and learning, *Distance Education*, 20 (2): 240-254.

Paavola, S. &Hakkarainen, K. (2005).'The knowledge creation metaphor – An emergent epistemological approach to learning'. *Science and Education*, 14(6), 535-557.

Parker, J. (2012). 'Transdisciplinary systems approach to paradigm change in sustainable economy' In *The Systemist*, 34 (3) Winter 2012, 138-149

Pretty, J. (2013). 'The consumption of a Finite Planet: Well-being, Convergence, Divergence and the Nascent Green Economy'. *Environmental and Resource Economics*. DOI 10.1007/s10640-013-9680-9

Quan-Baffour, K P (2012). 'The Liberative Power of Education: Adult Basic Education as Empowerment Tool for Rural Women' In *Studies of Tribes and Tribals* 10(2) 91-97.

Republic of South Africa. Department of Higher Education and Training. (2014). White paper on Post-Schooling Education and Training. Pretoria

Republic of South Africa. Department of Education. (2000). *Policy 52 of 2000 on Adult Basic Education and Training*. Pretoria

Republic of South Africa. (1998). *Skills Development Act 97 of 1998*. Pretoria

Ritchey, T. (2011). <u>Wicked Problems – Social Messes</u> <u>Risk, Governance and Society</u>, 17, 2011, 1-6

Rittel, H. and Webber, M. (1984). *Planning problems are wicked problems* Developments in Design Methodology. New York: Wiley.

Rockström, J., Steffen, W., Noone, K. (2009). 'A safe operating space for humanity' *Nature* 461: 472-475

Rogers, J. (2007). *Adults Learning 4*th ed., United Kingdom: Open University Press.

Romm, N. (2001). '*Accountability in Social Research: issues and debates'*. Kluwer. London.

Romm, N. (2002). 'A trusting constructivist view of Systems Thinking in a Knowledge Age'. *In Systems Theory and Practice in a Knowledge Age*. In Ragsdell et al .New York. Plenum.

Romm, N. (2010). *The New Racism*. Springer. London.

Rose, D.B.(2004). *Reports form a wild country.* University of New South Wales Press. Sydney.

Rose, D.B. (2005). 'Dislocating the Frontier' http://epress.anu.edu.au/dtf/html/frames.php see http://epress.anu.edu.au

Schumacher, F.F. (1973). *Small is beautiful. Economics as if people mattered*. Harper and Row. New York.

Senge, P et al (1994). 'The fifth discipline fieldbook: strategies and tools for building a learning organisation'

Senge, P. ,Kleiner, A. Roberts, C , Ross, R., Roth, G. and Smith, B (1999). '*The dance of change: the challenges of maintaining momentum in learning organisations'*, New York Double Day.

Shiva, V (2002). '*Water wars: privatization, pollution and profit'*, London, Pluto Press.

Shiva, V. (2011). '*Earth Democracy'*, Portland University, http://www.youtube.com/watch?v=UOfM7QD7-kk/

Singer, P., (2002). '*One World: The Ethics of Globalisation'*, Text Publishers, Melbourne.

Stern, N, (2007). '*The Economics of Climate Change'*. Cambridge. Cambridge University Press

Stiglitz, J. Sen, A. And Fitoussi, J.P. (2010). '*Mis-measuring our lives: why the GDP doesn't add up'.* The New Press. New York,

Stiglitz, Joseph E. (2012). *The Price of Inequality: How Today's Divided Society Endangers* Our Future. WW Norton.

Tutu, D (2013). www,thinkexist.com/quotes/bishop_desmond_tutu/ 5 June 2014

Treaty of Maastricht (1992). Article 5 on Subsidiarity.

Ulrich, W. (1983). *Critical heuristics of social planning: a new approach to practical philosophy.* Wiley. New York.

UNESCO, (2007). '*Biosphere Reserves: Dialogue in biosphere reserves'*. References, Practices and Experiences. ISSN 2071-1468. Paris. UNESCO

United Nations Climate Change Summit, Cancun (2010). United Nations Climate Change Summit https://unfccc.int/meetings/cancun_nov_2010/meeting/6266.php

United Nations Climate Change Summit, Durban (2011). *United Nations Climate* Change Summit https://unfccc.int/meetings/durban_nov_2011/meeting/6245.php

United Nations Economic and Social Development Local Agenda 21 (1992).

United Nations Human Development Index (2003). A compact among nations to end poverty. UNDP. New York. Oxford University Press.

United Nations. (2011). '*The Millennium Goals Report'* http://www.aidsdatahub.org/en/whats-new/287-all-data-alerts/728-the-millennium-development-goals-report-2011-united-nations-2011 Accessed July 19th, 2011.

United Nations.(1993). '*Integrated Environmental and Economic Accounting: Handbook of National Accounting: Studies in Methods'*, Series F. No 61, Department for Economic and Social Information and Policy Analysis, Statistical Division, United Nations, New York.

Urry, J. (2010). 'Consuming the planet to excess'. *Theory, Culture and Society.*. 27 191-212

Veletsianos, G. and Kimmons, R. (2011). 'Networked Participatory Scholarship: Emergent techno-cultural pressures toward open and digital scholarship in online networks' In *Computers & Education Elservier* 58. 766-774.

Vickers, G., (1983). '*Human Systems are Different'*, Harper and Row, London.

Villalba, C. and Romiszowski, A.J. (2001). 'Current and ideal practice in designing, developing and delivering web-based training', In Khan, B.H. (ed) *Web-based Training*, Englewood Cliff, NJ: ETP, p. 325-342

Wadsworth, Y. (2010). '*Building in Research and Evaluation.Human Inquiry for living systems'*. Allen and Unwin. Sydney

Wenger, E, White, N. and Smith, J. (2009). '*Digital Habitats: stewarding technology for communities'*. CP Square, Portland.

Wenger, E., (1998). '*Communities of Practice'.*Cambridge University Press.

Wilkinson, R. and Pickett, K. (2009). '*The Spirit Level'*. London. Allen Lane

Young, I.M. (2000). '*Inclusion and democracy'*. Oxford. Oxford University Press.