

## **The Psychological Preparation for the Children to Enjoy the Sport Who are 2-6 Year-Old**

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**Abstract:** The objective of this study is to know what can be done to prepare children psychologically to enjoy the sport and what the progressive features and factors can be efficient in their development have been researched. In this range, more than the development of children, growing up, learning, being ready and education; their physical development, mental tongue progressive, social development, personal development, moral and sexual development, their pre-school games and activities are researched and gathered. The aim of this research is to analyze methods, which are going to be produced in their pre-school education and to acquire them in sport. While doing this, it is searched and exposed in which ways, we should follow and how much we can benefit from the Physical Education. Physical Education is the important part of usual education so; also it is thought that it's important for the development of human being. It is cleared that it could be more successful in this education if, we care about the pre-school education. The knowledge from the materials we had is explained below.

**Key words:** Children, sports, evolution, 2-6 ages, psychological, preparation, enjoy

### **INTRODUCTION**

In our century, developing technology forces us to produce qualified individuals. It is clear that it can be done by only good pre-school education, because the education of these days is the main of the life in future. In pre-school education, the most important and useful things are games and their physical behaviors. The game is the easiest, meaningful and direct way, which they could express themselves. The child obtains his physical, perceptible and social development. Briefly, the game is the means learning life for the children. It is known that growing up and development is faster in the 0-6 year-old, in which period their personality has grown up. For a vigorous personality development of the children's physiological and psycho-social needs are to be received in time (Anderson *et al.*, 1995; Anzai and Yokoyama, 1984; Banks, 1998; Bartlett *et al.*, 2005; Carr, 2003; Clark, 1994).

The child obtains his personality parallel to his social development. The personality, which he got in social development period is related with his parents behaviors and the situation that they have formed. The helpful and negative reacts of parents play very important role in child's psychological and personal development. The

children, who are not considered, criticized or not allowed to say their ideas; may be withdrawn, bad-tempered, aggressive and distrustful. On the other hand, the children who are listened what they say, considered and not criticized all the time are more reliable and they develop more social and vigorous personality (Barnett, 1992, 1995; Berlinski and Galiani, 2007; Biesta, 2007; Gallavan, 1998; Garces *et al.*, 2002; Gayle-Evans and Michael, 2006; Gelbach, 2002).

Pre-school education is more important in children's development. The school's management and kind of its discipline determine the teaming circumference. Democratic and rewarder discipline is very important in learning. The badness of teaming circumference causes anxiety of school. Teacher is most important factor in children's education. Being a model of a teacher, sincerity with their students or being a leader is very considerable. Game is the secondary important psychological nourishment in child's gaining personality and development after love. It can't be considered a life for the children without love and game (Barnett, 1992; Biesta and Lawy, 2006; Bloom, 1984; Boyd and Arnold, 2000; Currie and Thomas, 1995, 1999; Currie, 2001; Currie *et al.*, 2007).

Playing games are very important for their progress. While he is playing, their senses get clear, their abilities progress, because the game is the most natural learning situation. It is a situation that they try what they see or stiffen what they learn. The child who is playing games is in his own life and dominant of his life. He makes rules and changes. If somebody mingles he gets angry. They react, if you try to change their game and their goods. They cry when you spoil their games. Game is the language of them to express themselves. They express their fear and anxiety with the game. The game is the unique profession of their age. But it doesn't end with the beginning of school. It changes to their range of development. So, it is not true to see the school of the end their gaming time. It is a mistake not to allow play games to the primary-school-student. It is an easy way to cool them in education. Instead of this, we should go between the game for an assistant of learning (Connelly and Clandinin, 1990; Cooney and Akintunde, 1999; Cruz-Jansen, 2000; Donnay, 2002; Duflo, 2001; Finney and Orr, 1995; Greene, 2005; Hill-Jackson, 2007; Hopkins, 1999; Hyde *et al.*, 1990; Jones, 1999; Gacel-Avila, 2005).

## **MATERIALS AND METHODS**

Pre-school education programs are arranged for 0-72 months children to support their healthy improvements in terms of cognitive, sentimental-social and psychomotor in the house and foundation environments. This program is arranged by taking into account, the children who show normal development. At the same time, it is worked that different development rhythm of each child has a flexibility of various implementations by remembering to differ facilities and conditions of each group needs and each education environment. Child conception in 0-72 months group is novel. This education area, which is called early childhood education is the years when the child spends from the childbirth to his primary school term (Anzai and Yokoyama, 1984; Barnett, 1992, 1995; Carr, 2003; Clark, 1994; Currie and Thomas, 1999; Greene, 2005; Hill-Jackson, 2007; Kambutu and Thompson, 2005; Lee *et al.*, 1990).

### **Game types according to ages**

**0-2 years:** In these years, children play function games. They try to recognize themselves and their environment with their hands, body and eyes. They like playing on one's own. Generally they are alone. Even if there are other children, they play their own game. They monitor others short span of time. There is no communication in this term because they aren't enough maturity in terms of

muscle, balance, language and cognitive development (Finney and Orr, 1995; Gayle-Evans and Michael, 2006; Gelbach, 2002; Joshua and Dupin, 1991; Kalyuga *et al.*, 2001).

**3 years:** Big muscles quite develop. They can succeed tumbling, coming up and down high places, hanging by hanging on to climbing stair, riding bike, walking on the stability wood. They create and apply new games (Anderson *et al.*, 1995; Biesta, 2007; Carr, 2003; Greene, 2005; Koblinsky *et al.*, 2006; Magnuson *et al.*, 2007; Palmer *et al.*, 2006; Williams, 2005).

**4 years:** Children are successful in terms of game activities in this term when small muscle development is fast. Manual skills are strong. They can paint usual pictures. At the same time, they join to running, climbing, drawing-hanging and digging movements with their all body (Anzai and Yokoyama, 1984; Banks, 1998; Currie, 2001; Currie *et al.*, 2007; Donnay, 2002; Hyde *et al.*, 1990; Jones, 1999; Kambutu and Thompson, 2005; Lawn *et al.*, 2005; Mason, 1999).

**5 years:** Body activities are dense. This year children are very active, such as; cutting, labeling, painting, games relative to letters, playing house, corner games, constructing games. They love playing house much more than the others (Biesta, 2007; Biesta and Lawy, 2006; Connelly and Clandinin, 1990; Cooney and Akintunde, 1999; Donnay, 2002; Kambutu and Thompson, 2005; Lawn *et al.*, 2005; Lee *et al.*, 1990; Maccini *et al.*, 1999; Magnuson *et al.*, 2007; Mezirow, 1978).

**6 years:** They research densely in all sorts of game and activity. At this age, game shows difference within itself. Female children play playing house, neighbor games, school games, doctor games and etc. Male children generally love spacecraft, plane, train, ship toys and pictures (Bartlett *et al.*, 2005; Barnett, 1992; Cruz-Jansen, 2000; Donnay, 2002; Hill-Jackson, 2007; Koblinsky *et al.*, 2006; Mathan and Koedinger, 2005; Palmer *et al.*, 2006; Renkl *et al.*, 2002; Sanders and Cotton-Nelson, 2004; Traor'e, 2006; Williams, 2005).

It should be given a preference the toys, which are beneficial in pre-school period. Climbing stairs, skiing chases, jumping ropes, tricycles facilitate developing big muscles. On this condition, preschool teacher's role is very important. Games, which are played in the fresh air supply that child benefit from the sun and the air. When the child plays the game, he/she does all sorts of activity naturally. A child who plays an active game many times can do concerned with that game's activities easily with

the assistance of muscle memory after a short time without using his/her mind. Muscles do easier activities, which they learned before according to be unknown activities.

The child can compose a game cleverly and without depending on a toy whenever he/she wants with an object, which he/she wants. If the child's age is getting bigger, his/her body generally stagnates and there is an increased orientation to the games, which research with the body in unison with more quiet and memory power skills (Anzai and Yokoyama, 1984; Biesta and Lawy, 2006; Donnay, 2002; Koblinsky *et al.*, 2006; Mathan and Koedinger, 2005; Mestre, 2002; Owen and Sweller, 1985; Reisslein *et al.*, 2006; Reynolds *et al.*, 2002; Sokolower, 2006; Teong, 2003; Thaddeus and Maine, 1994; Wood and Wood, 1999; Van Gog *et al.*, 2006; Van Heuvelen, 1991a, b).

#### **Benefits of the game:**

- Improvement comes true in the game process
- Game supply child's movement freedom
- Research is the compulsive members of curiosity game
- Basic of language development depends on game process
- Prompt adjudication and implication skills develop with game
- Care and concentration develop with game
- Game supply dynamic, alive learning environment and methods
- Game is important and valuable for human life continuity

Being game and toys are indispensable rules in the place, which the child is even if game changes from culture to culture and from age to age. According to most of us, the game which fills child's free time is an aimless work. But, the game which affects child's life at all points is very important work for the child. The child who is prevented playing game doesn't show healthy development (Anderson *et al.*, 1995; Biesta, 2007; Carr, 2003; Duflo, 2001; Gacel-Avila, 2005; Greene, 2005; Hill-Jackson, 2007; Kalyuga *et al.*, 2001; Lawn *et al.*, 2005; Meier *et al.*, 1999; Renkl *et al.*, 2002; Reynolds and Temple, 1998; Scheurich and Young, 1997; Teong, 2003; Woodrow, 1998).

The most important tool, which a teacher can use for child's development is a game. Thus, a preschool teacher should never rule educational principle in the game out. On the other hand, the healthiest way, which we can know and we can communicate with him/her is the game, because the child who plays the game is in his/her own

world. Everything is according to the rules, which he/she wants. He/she expresses himself the best way. He/She gets into works and roles, which he/she continues his/her life in the future with game. He/she supplies an emotional release by moving his/her body. Parents and teachers know that the most important work of a child is game until he/she is 6 (Anzai and Yokoyama, 1984; Berlinski and Galiani, 2007; Biesta and Lawy, 2006; Hill-Jackson, 2007; Lee *et al.*, 1990; Maccini *et al.*, 1999; Moreno, 2006; Owen and Sweller, 1985; Robinson and Gillibrand, 2004; Scheurich and Young, 1997; Sokolower, 2006; Traor'e, 2006; Williams, 2005).

## **RESULTS**

Today, it is known that sport completely plays a role on the child's development as an educational tool. It develops emotions such as participating pertaining sports games, solidarity on the child, working together, respecting other team members and game arrangement. Years ago according to Yan Amos Komenski first of all, the child's world is game. Child starts games as from 0 year and he/she plays various goal and character games in the different ages groups. Game is an activity, which, it supplies the opportunity for the child's personality achieving. Piaget handles the game from a structural point of view and he confirms three kinds of game; games which is drill, symbolic games, games which conforms to rules (Anderson *et al.*, 1995; Berlinski and Galiani, 2007; Connelly and Clandinin, 1990; Donnay, 2002; Duflo, 2001; Magnuson *et al.*, 2007; Robinson and Gillibrand, 2004; Thaddeus and Maine, 1994).

Games, which is drill develop in 1st months, it reaches crescendo about 2 or 3 years old. Symbolic games start symbolic functions during 2 years and it passes from a crescendo during autarchy period and then, it starts its effect. Game, which conforms to a rule that is formed without emulating adults game rules is a kind of a game peculiar to gaining haecceity and socialization terms. It is known that game is a common agreement way among the children. Game, which develops the child's physical and mental construction and supplies gaining freedom and haecceity and establishes relation with objects word and then, facilitates his/her socialization is a very important activity (6-12). Especially at the present day, children's movement areas are very limit. The child who lives in a flat goes to the school by service and spends his/her time in view of television and computer misses playground and parks for reason of awry urbanization. On this condition, pertaining sports activities and physical education lessons, which correspond his/her movement need and disburden his/her energy are getting more important.

Anyway, the goal of the physical education lessons supply developing person's body, psyche and concept according to basic principles Ministry Education (Anzai and Yokoyama, 1984; Boyd and Arnold, 2000; Gayle-Evans and Michael, 2006; Gelbach, 2002; Joshua and Dupin, 1991; Maccini *et al.*, 1999; Renkl, 2002; Shealey and Lue, 2006; Van Heuvelen, 1991a).

In this study, game, gym and pertaining sports works oriented towards being a person healthy with his/her body, alert and spiritually healthy. But, it is true that crowded classes can't do these goals, which is adopted and planned as lesson content theoretically because of inadequate tool, device and lack of efficient teacher. The child's social and sentimental developments in his/her 1st years compose the basic of his/her social and sentimental development in the future years. Walking and speaking features, which gain in the small childhood and autarchy term partially rescues him/her desperation of nursing infant. While he/she is getting the entire pleasure one can out of these skills that gains newly, he/she starts discovering the freedom. But, the forbidden that he/she never thinks step in. If they are given free hand about their skills, a healthy development can be waited. Preschool or game period is one of the most colorful ages (Banks, 1998; Berlinski and Galiani, 2007; Boyd and Arnold, 2000; Finney and Orr, 1995; Hill-Jackson, 2007; Meier *et al.*, 1999; Reynolds *et al.*, 2002).

Game is the most important work of this period child. Game is the most important psychic nutrient after the love. In the preschool period effects of the socialization start to be seen in developing motor skills. Child recognizes his/her own body in the pertaining sports games. He/she obtains movements, which he/she can succeed and can't succeed experiments by learning in the safe environment. He/she learns sharing and solidarity with the same age children. He/she obtains responsibility and studying regularly (Berlinski and Galiani, 2007; Gacel-Avila, 2005; Jones, 1999; Mezirow, 1978; Scheurich and Young, 1997; Thaddeus and Maine, 1994; Williams, 2005; Van Heuvelen, 1991a).

Researches, which was done about the subject whether attitudes alterations in the psychological and social area, which are obtained by way of physical education, sport activities and games transfer to the general life of the person show that attitudes transfer to necessary and concerned situations. Obtained these social attitudes depends on kinds on game, its quality and condition of game's friends and his/her environment. Playground is the best environment to socialize among the children because game is a serious and purposeful research. Children pass from different stages until the primary school. Sometimes they can play alone.

Sometimes, they can play other children. While play environment is arranged, it is supplied that child both enjoys cheerful and not be afraid of struggle. Game is the most important contribution for child from a social point of view. In the game group, child should comprehend that everything isn't like their desire and he/she should recede from egoism and learn to say we instead of I (Banks, 1998; Barnett, 1992; Currie *et al.*, 2007; Kalyuga *et al.*, 2001; Mestre, 2002; Reisslein *et al.*, 2006; Reynolds and Temple, 1998; Shealey and Lue, 2006; Wood and Wood, 1999).

The child who is directed to developing his/her muscles in the game firstly and then in the systematic and regular sport activity has a strong physical construction. This state will obstruct the child getting into feeling of inferiority and being dangerous his/her narcissism near the child's peers after some time. It can be used to be rewarded all successes of the child in the social activities in order to obtain to confidence emotion which is important in personality development. Awards and participant certificate should be given the children who attend organizations that are done until end of the school period. If a healthy child is deprived from the physical activities and is obstructed enough moving, his/her psychomotor development stands a loss, thus, his/her rate of success in the school declines. On this subject, one of the examples, which are known is related to a study that is done in France. In the research, which was done in Vanve near Paris and is called the name of this region primary school students were divided 2 groups and some student's lesson numbers were maintained while others were declined. In the group, which was declined the lesson hours, Physical education and sport hours were increased and sport was done by dividing the students various areas. In the evaluation, which was done at the end of the year group, which receives training according to old program success rate is 60% and group that was increased lesson hours success rate is 89% (Anderson *et al.*, 1995; Barnett, 1992; Currie and Thomas, 1999; Jones, 1999; Joshua and Dupin, 1991; Koblinsky *et al.*, 2006; Mezirow, 1978; Renkl, 2002; Robinson and Gillibrand, 2004; Shealey and Lue, 2006; Van Heuvelen, 1991b).

## DISCUSSION

At the present day, a lot of family makes an effort to supply the opportunities for their children such as paying the course wage, waiting during the training, buying sport material. But they want their children to be better and more successful than others during their activities. Secure playground and an effective socialization postpone. However, children feel worthless themselves and they can

develop hostility emotions to other friends because of their parent's desire, expecting a lot of things and reflecting their disappointments. Whereas directing attitude to the concrete target capacity can be only developed with age and through contribution with their peers like Piaget's offer (Bartlett *et al.*, 2005; Biesta and Lawy, 2006; Joshua and Dupin, 1991; Mason, 1999; Reisslein *et al.*, 2006; Renkl *et al.*, 2002; Scheurich and Young, 1997; Williams, 2005).

Effect of successful or unsuccessful experiments of the small children is documented with starting Pauline Sears works. The child who lives a success which is approved and rewarded by an adult or peer group can tolerate failures that are sometimes encountered and tolerate a day that spend without studying. But, the child who is qualified permanent their experiment unsuccessful suffers due to the temporary downfall or not approved by the people who are important for them. So, desire which falls for the performance falls and at the end it can disappear and child calls off from experiencing. These important ascertainments should take into account while game and pertaining sports implementations are performed as a tool of socialization (Anzai and Yokoyama, 1984; Connelly and Clandinin, 1990; Currie and Thomas, 1999; Gelbach, 2002; Mezirow, 1978; Reynolds *et al.*, 2002; Teong, 2003; Van Heuvelen, 1991b).

Efficient teachers, recreation leaders should be responsible in the organizations. Objections that will be determined for children should be determined to supply the opportunities solving the problems, succession together and feeling a part of a group. Benefits of cognitive arranged child sport is big and children's participants in sport should be encouraged. It is believed that the child who comprehends the cooperation and competition with sport will develop social values in the future. Much time, money and effort are spent to order child's sport. It can be implemented with investments of government and voluntary establishments, family's support and experts' leadership (Barnett, 1995; Hill-Jackson, 2007; Koblinsky *et al.*, 2006; Pol *et al.*, 2005; Scheurich and Young, 1997; Woodrow, 1998).

Certainly, it is not enough benefit of sport to say increasing only supportive success. In the near future doing sport is big matter on growing the people who will be loaded responsibility in the society, obtaining good habitual and developing live together beginning from early ages. Doing sport should be necessity to grow healthy for children (Banks, 1998; Bartlett *et al.*, 2005; Garces *et al.*, 2002; Hopkins, 1999; Kambutu and Thompson, 2005; Meier *et al.*, 1999; Robinson and Gillibrand, 2004; Shealey and Lue, 2006; Woodrow, 1998).

Because child's body has a variable construction in terms they growing is fast, sport plays an important role on preventing and delaying the physical disturbances. Researches, which were done show that if the children are obtained regular doing sport habit, this will continue next years. It is difficult to obtain doing regular sport habit. So, one of the most important conditions starts the sport in the early ages. Regular doing sport habit are obtained in the childhood ages. Because a lot of family accepts the spontaneous movement as naughtiness, they try to prevent. This attitude of the family causes of increasing the children's spending hours with TV because of declining the empty lands and playgrounds (Anderson *et al.*, 1995; Boyd and Arnold, 2000; Donnay, 2002; Hyde *et al.*, 1990; Maccini *et al.*, 1999; Owen and Sweller, 1985; Reynolds and Temple, 1998; Thaddeus and Maine, 1994; Van Heuvelen, 1991a).

To follow of growth (growth monitoring) evaluation of child's growth in definite time in appropriate standard growth curves is defined as taking preventive measures with the help of determined abnormal changes. Growth is reliant to genetic potential and environmental factors those affect it. Balanced and sufficient diet is the most important environmental factor affecting the growth. Moreover, most of all gastrointestinal infections, infection ailments cause catabolic destruction and affect nutrition of child bringing about him/her not to be nourished enough during the illness. Child growth is affected from infections dramatically if they reappear. Evaluation of growth; it is expected from a child's weight to be fit to height and height to fit to his/her age who grows up healthy. For this reason, diet situation of the child can be evaluated ideally taking those three parameters; age, body weight, height (Anzai and Yokoyama, 1984; Boyd and Arnold, 2000; Gayle-Evans and Michael, 2006; Lawn *et al.*, 2005; Reisslein *et al.*, 2006; Sanders and Cotton-Nelson, 2004; Williams, 2005).

Main features of children and youngs is to exist in a development process that can be observable obviously. Development of youngs and children is first clarified by maturation processes. The first of these processes is physical growth which is development of nervous-muscle system and heart-circulation system as they reach to normal function level taken in hand detailed. Another is alternation in endocrine glands functions that is responsible for instinctive and affective component of behavior. It is required functions to be developed in a person enough to do a definite action or to be successful. Child training includes kinds of actions have numerous functions that is intended for an aim and it is training devoted to prepare child a certain sports branch. It is known that child and young training have its own

character, because the content of child and young training is not the quality of a limited adult training. They are done appropriate to their own rules and conditions (Biesta and Lawy, 2006; Currie, 2001; Finney and Orr, 1995; Hyde *et al.*, 1990; Moreno, 2006; Robinson and Gillibrand, 2004; Shealey and Lue, 2006; Woodrow, 1998; Van Heuvelen, 1991a).

## CONCLUSION

In conclusion, the preschool education is a very important process in the mental, psychological and social development of children. Between the ages of 2-6, children need the games and any other physical activities because of the increased motorized abilities and the aspiration of discovery. Therefore, these necessities can be misunderstood by the parents and they may encounter some barriers. Sportive and physical activities have important roles in the psychological development of the children. By the help of planned and programmed educational, sportive and enjoyable games and activities, the psychological preparation process of children between 2-6 years old will be provided successfully.

## REFERENCES

- Anderson, J.R. *et al.*, 1995. Cognitive Tutors: Lessons Learned. *J. Learn. Sci.*, 4 (2): 167-207.
- Anzai, Y. and T. Yokoyama, 1984. Internal models in physics problem solving. *Cognition and Instruction*, 1 (4): 397-450.
- Banks, J.A., 1998. The lives and values of researchers: Implications for educating citizens in a multicultural society. *Edu. Researchers*, 27 (7): 4-17.
- Bartlett, L.A. *et al.*, 2005. Where giving birth is a forecast for death: Maternal mortality in 4 districts of Afghanistan. *The Lancet*, 365 (9462): 864-870.
- Barnett, S., 1992. Benefits of compensatory preschool education. *J. Hum. Resour.*, 27 (2): 279-312.
- Barnett, S., 1995. Long-term effects of early childhood programs on cognitive and school outcomes. *The Future of Children*, 5 (3): 25-50.
- Berlinski, S. and S. Galiani, 2007. The effect of a large expansion of pre-primary school facilities on preschool attendance and maternal employment. *Labour Econ.*, 14 (3): 665-680.
- Biesta, G., 2007. Education and the democratic person: Towards a political conception of democratic education. *Teachers College Record*, 109 (3): 740-769.
- Biesta, G.J.J. and R.S. Lawy, 2006. From teaching citizenship to learning democracy, overcoming individualism in research, policy and practice. *Cambridge J. Edu.*, 36 (1): 63-79.
- Bloom, B.S., 1984. The 2 Sigma Problem: The search for methods of group instruction as effective as one on one tutoring. *Edu. Researcher*, 13 (6): 4-16.
- Boyd, D. and M.L. Arnold, 2000. Teachers Beliefs, Antiracism and Moral Education. *J. Moral Edu.*, 29 (1): 23-45.
- Carr, K., 2003. Innovations in Midwifery education. *J. Midwifery Women's Health*, 48 (6): 393-397.
- Clark, R.E., 1994. Media will never influence learning, educational technology. *Res. Develop.*, 42 (2): 21-29.
- Connelly, F. and D. Clandinin, 1990. Stories of experience and narrative inquiry. *Edu. Res.*, 19 (5): 2-14.
- Cooney, M. and O. Akintunde, 1999. Confronting white privilege and the color blind paradigm in teacher education program. *Multicul. Edu.*, 7 (2): 9-14.
- Cruz-Jansen, M., 2000. From our readers: Preparing pre-service teacher candidates for leadership in equity. *Equity Excellence Edu.*, 33 (1): 94-101.
- Currie, J. and D. Thomas, 1995. Does head start make a difference? *Am. Econ. Rev.*, 85 (3): 341-364.
- Currie, J. and D. Thomas, 1999. Does head start help hispanic children? *J. Pub. Econ.*, 74 (2): 235-262.
- Currie, J., 2001. Early childhood education programs. *J. Econ. Countries Perspect.*, 15 (2): 213-238.
- Currie, S. *et al.*, 2007. A bold new beginning for midwifery in Afghanistan. *Midwifery*, 23 (3): 226-234.
- Donnay, F., 2002. Maternal survival in gynecologic developing what has been done, What can be achieved in the next decade. *Int. J. Obstet.*, 70 (1): 89-97.
- Duflo, E., 2001. Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment. *Am. Econ. Rev.*, 9 (4): 795-813.
- Finney, S. and J. Orr, 1995. I've really learned a lot but...: Cross cultural understanding and teacher education in a Racist society. *J. Teacher Edu.*, 46 (85): 327-333.
- Gacel-Avila, J., 2005. The internationalization of higher education: A paradigm for global citizenry. *J. Stud. Int. Edu.*, 9 (2): 121-136.
- Gallavan, N., 1998. Why aren't teachers using effective multicultural education practices? *Equity Excell. Edu.*, 31 (2): 20-27.
- Garces, E. *et al.*, 2002. Longer-term effects of head start. *Am. Econ. Rev.*, 92 (4): 999-1012.
- Gayle-Evans, G. and D. Michael, 2006. A study of pre-service teachers' awareness of multicultural issues. *Multicul. Perspect.*, 8 (1): 44-50.
- Gelbach, J., 2002. Public schooling for young children and maternal labor supply. *Am. Econ. Rev.*, 92 (1): 307-322.
- Greene, P.N., 2005. Cajun, Creole and African American literacy narratives. *Multicul. Perspect.*, 7 (4): 39-45.

- Hill-Jackson, V., 2007. Wrestling whiteness: Three stages of shifting multicultural perspectives among white pre-service teachers. *Multicult. Perspect.*, 9 (2): 29-35.
- Hopkins, J.R., 1999. Studying Abroad as a form of experiential education. *Liberal Educ.*, 85 (3): 36-41.
- Hyde, J.S. *et al.*, 1990. Gender differences in mathematics performance: A meta-analysis. *Psychologi. Bull.*, 107 (2): 139-155.
- Jones, B.R., 1999. Globalization and change in the international political Economy. *International affairs: Royal Inst. Int. Affairs*, 75 (2): 357-367.
- Joshua, S. and J. Dupin, 1991. In physics class, exercises can also cause problems. *Int. J. Sci. Edu.*, 13 (3): 291-301.
- Kalyuga, S. *et al.*, 2001. When problem solving is superior to studying worked examples. *J. Edu. Psychol.*, 93 (3): 579-588.
- Kambutu, J. and S. Thompson, 2005. Exploring processes that help adult learners become culturally responsive. *J. Adult Edu.*, 34 (2): 6-19.
- Koblinsky, M. *et al.*, 2006. Maternal survival series steering group. Going to scale with professional skilled care. *The Lancet*, 368 (9544): 1377-1386.
- Lawn, J.E., S. Cousens and J. Zupan, 2005. Four million Neonatal deaths: When? Where? Why? *The Lancet*, 365 (9462): 891-900.
- Lee, V. *et al.*, 1990. Are head start effects sustained? A longitudinal follow-up comparison of disadvantages children attending head start, No. Preschool and other preschool programs. *Child Dev.*, 61 (2): 496-507.
- Maccini, P. *et al.*, 1999. Algebra instruction for students with learning disabilities: Implications from a research review. *Learning Disabil. Quart.*, 22 (2): 113-126.
- Magnuson, A.K. *et al.*, 2007. Does prekindergarten improve school preparation and performance? *Econ. Edu. Rev.*, 26 (1): 33-51.
- Mason, T., 1999. Prospective teachers attitude toward urban schools: Can they be changed? *Multicult. Edu.*, 6 (4): 9-13.
- Mathan, S.A. and K.R. Koedinger, 2005. Fostering the intelligent novice: Learning from errors with metacognitive tutoring. *Edu. Psychol.*, 40 (4): 257-265.
- Meier, K.J. *et al.*, 1999. Representative bureaucracy and distributional equity: Addressing the hard question. *J. Politics*, 61 (4): 1025-1039.
- Mestre, J.P., 2002. Probing adults conceptual understanding and transfer of learning via problem posing. *Applied Dev. Psychol.*, 23 (1): 9-50.
- Mezirow, J., 1978. Perspective transformation. *Adult Edu.*, 28 (2): 100-110.
- Moreno, R., 2006. When worked examples don't work: Is cognitive load theory at an impasse? *Learning and Instruction*, 16 (2): 170-181.
- Owen, E. and J. Sweller, 1985. What do students learn while solving mathematics problems? *J. Edu. Psychol.*, 77 (3): 272-284.
- Palmer, N. *et al.*, 2006. Contracting out health services in Fragile states. *Br. Med. J.*, 332 (7543): 718-721.
- Pol, H. *et al.*, 2005. Solving physics problems with the help of computer-assisted instruction. *Int. J. Sci. Edu.*, 27 (4): 451-469.
- Reisslein, J. *et al.*, 2006. Encountering the expertise reversal effect with a computer-based environment on electrical circuit analysis. *Learn. Instruct.*, 16 (2): 92-103.
- Renkl, A., 2002. Worked-out examples: Instructional explanations support learning by self-explanations. *Learn. Instruct.*, 12 (5): 529-556.
- Renkl, A. *et al.*, 2002. From example study to problem solving: Smooth transitions help learning. *J. Exp. Edu.*, 70 (4): 293-315.
- Robinson, W.P. and E. Gillibrand, 2004. Single-sex teaching and achievement in science. *Int. J. Sci. Edu.*, 26 (6): 659-675.
- Reynolds, A.J. and J.A. Temple, 1998. Extended early childhood intervention and school achievement: Age 13 findings from the Chicago longitudinal study. *Child Dev.*, 69 (1): 231-246.
- Reynolds, A.J. *et al.*, 2002. Age 21 cost-benefit analysis of the title I Chicago child-parent centers. *Edu. Evalu. Policy Anal.*, 24 (4): 267-303.
- Sanders, J. and S. Cotton-Nelson, 2004. Closing Gender Gaps in Science. Advanced placement science and technology teachers examine gender bias in their teaching practices. *Edu. Leadership*, 62 (3): 74-77.
- Scheurich, J.J. and M.D. Young, 1997. Coloring epistemologies: Are our research epistemologies racially biased? *Edu. Res.*, 26 (4): 4-16.
- Shealey, M.W. and M.S. Lue, 2006. Why are all black kids still in special education? Revisiting the issue of disproportionate representation. *Multicul. Perspect.*, 8 (2): 3-9.
- Sokolower, J., 2006. Bringing globalization home: A high school teacher helps immigrant students draw on their own expertise. *Rethinking Schools*, 21 (1): 46-50.
- Teong, S.K., 2003. The effect of metacognitive training on mathematical word-problem solving. *J. Comput. Assist. Learn.*, 19 (1): 46-55.
- Thaddeus, S. and D. Maine, 1994. Too far to walk: Maternal mortality in context. *Soc. Sci. Med.*, 38 (8): 1091-1110.

- Traor'e, R., 2006. Voices of African students in America: We're not from the jungle. *Multicul. Perspect.*, 8 (2): 29-34.
- Williams, T.R., 2005. Exploring the impact of study Abroad on students intercultural communication skills: Adaptability and sensitivity. *J. Stud. Int. Edu.*, 9 (4): 356-371.
- Woodrow, J., 1998. Technology-enhanced instruction: A perspective from experience. *J. Technol. Teacher Edu.*, 6 (1): 3-9.
- Wood, H. and D. Wood, 1999. Help seeking, learning and contingent tutoring. *Comput. Edu.*, 33 (2): 153-169.
- Van Gog, T. *et al.*, 2006. Effects of process-oriented worked examples on troubleshooting transfer performance. *Learn. Instruct.*, 16 (2): 154-164.
- Van Heuvelen, A., 1991a. Learning to think like a physicist: A Review of research-based instructional strategies. *Am. J. Physics*, 59 (10): 891-897.
- Van Heuvelen, A., 1991b. Overview, case study physics. *Am. J. Physics*, 59 (10): 898-907.