

Research Article

Home-schooling in the 21st Century: Role of Technology in Supporting Parents in Home-Schooling their Children

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A B S T R A C T

A large majority of parents who home-school their children have different ideas as to the way their child should be educated. The parents who home-school their children have a deep desire to design their child's education according to their deeply held belief systems especially about what their child needs to learn. Parental involvement is an integral aspect of home schooling as the commitment is of a deeper kind. Homeschooling today is viewed as a small, but integral part of the alternative education ecosystem. It has gained wider attention and more-mainstream acceptance as the numbers of students learning at home have seen unprecedented increase. This trend is due to technological advances and is driven in some measure by the expansion of virtual/online schooling options.

Keywords: Home-schooling, Technology, Parental Involvement, Student Needs, Emerging Technologies

Introduction

Homeschooling is described as the execution of the parents' rights to educate their children at home. Although, "every child has the right to an education and is required by law to attend school there are families who choose to homeschool their children instead" (Geary, p. 1, 2011). Homeschooling has shown an increasing trend during the last two decades, with reports indicating that approximately 2.9% of all students aged five to 17 in the U.S. were fully homeschooled in 2007 and a more recent estimated rate in 2014 of 3.4% of 5 to 17 year-olds being homeschooled, with 53% (of the 3.4%) being middle or high school age (Aud, 2010; Kunzman & Gaither, 2013, Noel et al., 2013). In view of this continual increase in home-schooling, this paper will identify the many reasons as to why parents home-school and in what ways technology has helped in the exponential rise of home-schooling across board.

Parental Involvement

Parental involvement is one of the most important factors in terms of the academic achievement of a child. (Christenson, Rounds, & Gorney, 1992; Epstein, 1991). Research studies have indicated the role of parents in terms of educational achievement as Dauber and Epstein (1993) state:

- Research conducted for nearly a quarter of a century has shown convincingly that parent involvement is important for children's learning...children are more successful students at all grade levels if their parents participate at school and encourage education and learning at home, whatever the educational background or social class of their parents (p.53).

There is no doubt that parental involvement maximizes the potential of the children even during pre-schooling years. Studies show that the likelihood of attending and completing college increases as parents are a crucial support

system and are there to guide their children through a college preparatory curriculum. (Cunningham, Erisman and Looney, 2007). Boocock (1972) writes, "Most children and their parents value success. What differs is the degree to which this yearning is translated into a workable set of life goals and strategies for teaching them. Parents of achievers not only expect more and communicate this to their children, but they also teach them the behavior needed to fulfill their expectations" (p.130). This sort of proactive communication of the academic aspirations on the part of the parents for their children is referred to as parental involvement (Bloom, 1992).

There are many other elements that are a part and parcel of parental involvement (Brown, 1994; Taylor & Wilson, 1995; McNeal Jr, 2014).). Some parents have a deep sense of responsibility and commitment and are always engaged in their child's learning process. They fulfill good parenting roles in terms of laying foundations when the child is at a teachable age. According to research, this can be manifested in different ways: a) pre-school activities at home like naming objects, coloring, values, attitudes b) visits to schools to meet teachers/principal so that a working relationship is established as a collaborative initiative and partnership in the learning and development of their child, c) PTA to keep up with classroom learning, d) assisting in the governance of the school by either being directly present in the governing bodies as members or volunteering in the school programs, e) helping the school management in developing new plans for the school in terms of technology, new courses, new buildings, or renovating old ones, f) cooperating in after school activities like: supervising homework, interacting with the child by talking about school activities (this not only bonds the parent with a child but the parents gets to know how much a child is learning or who his /her friends are, what are his /her fears are etc.), monitoring TV time and quality of programs they see, regulating extra study hours, playtime and so forth. (Fan & Chen, 2001; Sheldon, 2002; Grolnick, Benjet, Kurowski, & Apostoleris, 1997; Sylva, et al, 1999; Melhuish et al, 2002; Epstein, 1994; 2001).

The impact of parental involvement in terms of providing a home learning environment (HLE) focusing on achievement and cognitive development has been studied in the recent years (Melhuish et al, 2008). This particular study aimed to advance research on parenting during pre-school years by studying certain aspects of home environment and pre-school composition. This could provide insight into the roles home and preschool played on children's literacy and numeracy. The term HLE was devised to describe a range of learning related activities that were associated with the home environment and were to be reported by parents. These activities: were reading, library visits, playing with letters and numbers, painting and drawing, teaching (through play) the letters of the alphabets, teaching nursery

rhymes and singing. Melhuish et al (2008) concluded, "In the Early years Home Learning Environment (Early years HLE) in the pre-school period) parenting practices such as reading to children, using complex language, responsiveness and warmth in interactions are all associated with better developmental outcomes" (p.21).

Another significant aspect of the report by Melhuish et al (2001) was that "Whilst HLE scores were generally higher in the homes in the upper social classes, there are parents high on SES and qualifications index who provide a home environment low on HLE index" and then "there are parents low on SES and qualification index who provide a home environment high on HLE index" (p 9). This study provides two insightful observations regarding parental involvement in the home. First, parental involvement in a child's educational attainment even before schooling (pre-school stages) has a significant impact on their learning. Second, the parents with lower SES and lower educational qualification can make a significant contribution in the attainment/achievement goals by a creating positive HLE. A study in the United States (Siu-Chu & Willms, 1996) concluded that parent-child interaction was the factor most linked to academic achievement. The role of parent-child interaction geared towards academic achievement is applicable to all parents, but the interactions and efforts of the home-school parents are of a different nature as the conscious and intentional choice to home-school their child may have been made because of a deeply felt need to offer their child a less trodden, more meaningful academic pathway. The reasons for parents to have made this choice may vary from one family to the next.

Home-schooling and Parental Involvement

Parental involvement, according to Grolnick and Slowiaczek (1994), is "the dedication of resources by the parent to the child within a given domain" (p. 238). This definition points to the fact that there is a distinct difference between parents' overall involvement with the child and parental involvement in the domain of a child's education. To which domains parents will become proactively involved will depend on many variables like their time, resources and value systems. This definition fits very well with the involvement and complete commitment of home-schooling parents with their children; an involvement that is not limited to just the educational journey of their child, but across all domains. The home-school parents dedicate of their resources (time, talents, skills and finances) unstintingly to the education of the children. Home-schooling ones children is a daunting task and requires a lot of planning, hard work and grit.

Reasons for Home Schooling

There are different reasons why parent's homeschool and invariably researching homeschooling provides an insight

into them. Parents may home-school their children because of religious, social and philosophical reasons as well as reasons that are more child related for example: gifted child, special needs child, introvert child or maybe a child who is bullied. Van Galen has very aptly categorized home-schooling parents into two categories: the pedagogues and the ideologues.

Pedagogical Motivations

The pedagogues are motivated to teach their children, as Romanowski (2006) opines, “their main argument is not concerned with the content of the public school education but rather their belief that whatever public school teach, they teach ineptly” (p, 128). The concern of the homeschool parents towards their child’s education is based on the perception that public schools tend to limit the abilities of their child by casting them into the systems, molds, curriculum and expectations that the school systems stand for. One of the home-schooling mothers (Haugh, 2014) who needs to start reading with her son writes that “the expectations of the school system to have students reading at standard levels does not allow for natural development of reading based on the readiness of the brains” (p.7). She further points that boys develop reading readiness at a later stage (as cited in Wolf, 2007), but the public school systems may force children to learn or do things they are not yet physiologically or pedagogically prepared for (Wolf : 2007). The other closely connected threads bound to the pedagogues concerns are:

- Parental understanding on how children learn, more individualized teaching; one to one instruction, curriculum choice and enrichment (Millet, 1984; Brabant, Bourdon & Jutras, 2003; Boschee & Boschee, 2011). Parents think they can provide better education at home wherein the learning environment is flexible, can be customized and children can accomplish more (Bauman; 2002; Ray, 1999).
- Parents feel there is a lack of motivation in Public-schools (Boschee & Boschee, 2011: Haugh, 2014).
- Public schools may have too much rivalry and competition, peer-pressure, lack of discipline as well as bullying (Hetzel, 2001; Thomas; 1998).
- Parental involvement is sustained and continuous in home schooling (Romanowski, 2001).
- Parents’ own negative experiences of schooling may make them home school their children (Knowles; 1999).

Ideological Motivations

The motivation of the ideologues lead to home-school their children. These parents do not want the state to control the education of their child, but want to mold the education of the child in step with their belief systems or world views (Van Galen 1988; Mayberry, 1988). These belief systems could be religious beliefs (all types and denominations), personal

belief systems, New Age belief systems, or atheistic belief systems that resonate very well with Romanoski’s (2003) statement that homeschooling attracts “ a demographic diversity that includes virtually all races, religions, socio-economic groups and political viewpoints. There are conservatives who consider public education too liberal, liberals who consider it too conservative and those who are driven by religious convictions” (p. 82). A parent can teach and impart a particular set of values, beliefs and worldview to his/her child and feel confident that they have prepared the child to face the world that will help them to live fruitful lives, instead of wasting time to learning and unlearning the value systems and beliefs that can limit them.

Children with Diverse Characteristics: Special Needs

The decision to homeschool children may be derived from diverse reasons. For example, literature describes the experiences of parents with children with Behavioral, Emotional and Social Difficulties (BESD), which seem to adopt homeschooling “by default”, as well as that of parents of minority students that are disproportionately placed in special education classes (Broom, 2013; Rivero, 2010; Mazama & Lundy, 2012). For example, homeschooling may be attributed to the fact that home-school relationships are clearly fragile and infused with notions of blame and guilt on the part of the parents when their children have special needs (Broomhead, 2013). Research shows that parental experiences of blame and guilt were predisposed by the nature of their children’s special educational needs. Parents of children with special needs find themselves in a position where attention is placed both on the educational success of their children and on the role that the educational environment will play in helping them reaching their academic goals. In seeking the best options for the students’ academic experiences, parents seem to turn to homeschooling by “default” (Rivero, 2010). For example, in the case of families with children with autism spectrum disorder, this default may appear as a better fit to keep their children within a comfortable and familiar environment, however, such environments may not meet the minimum educational needs in terms of daily time dedicated to instruction and content areas covered, as well as minimizing the number of social opportunities for the students (Simmons, 2014). Moreover, even for special need students that may have average to higher cognitive abilities, such as children with Asperger Syndrome (AS), the homeschooling option may seem more tempting as students in this spectrum are considered socially awkward and may have problem to interacting with other students in a regular school setting (Pyles, 2004). Pyles (2004) seeks to empower parents of children with AS to gain knowledge about the implications of homeschooling their children and provides a wealth of experiential practices directly from the parents’ perspective.

Research regarding the influence of parent-facilitated educational environments, as compared to regular public education, found that homeschooled students identified as having Attention Deficit Hyperactivity Disorder (ADHD) “were academically engaged about two times as often as public school students and experienced more reading and math gains” (Duvall, Delquadri, & Ward, 2004. p. 150). Duval et. al. (2004) suggest that the student-teacher ratios made a significant difference in favor of homeschooled students when compared to those who attended regular school settings. In the case of students with ADHD, parents were instrumental in their children’s basic skill acquisition over time (Duvall, et. al., 2004).

On a different yet relevant, aspect, the involvement of African American families in the homeschooling movement has been deemed significant, with base in the overrepresentation of this minority group in special education school placement. The motivations of homeschooling Black parents seem to be drawn from besides a true educational purpose, racial protectionism of their children, particularly from the possible effects of school-related racism (Mazama & Lundy, 2012). Mazama and Lundy (2012) found that interviewed parents showed high “awareness of institutional and individual racism and how it has historically impeded Black lives” addressing that school racism had an adverse effect on their “children’s ability to develop their full academic potential as well as a healthy sense of worth and self-confidence” (p.733; 742). In regards to this group’s academic performance, Ray (2015) conducted an exploratory, cross-sectional and explanatory non-experimental study and found evidence that Black homeschooled students performed better on average, particularly in reading, language and math, than similar peers who attended public schools and in general had a performance equal to or higher than other students who attended public schools (Ray, 2015).

As noted in Bolle, et. al. (2007) and Ray (2009), homeschooled students do as well or better on measures of social and emotional development while other research indicates extraordinary strength in the area of leadership (Bolle, et. al., 2007). The aforementioned are all important aspects for students with special educational needs whose self-efficacy and motivation play an important role in successfully reaching their academic goals.

Home-schooling the Gifted

Renzulli’s (1978) three-ring definition of giftedness is very helpful for understanding the needs of gifted children:

- Giftedness consists of an interaction among three basic clusters of human traits these clusters being above average general abilities, high levels of task commitment and high levels of creativity. Gifted and talented children are those possessing or capable of applying them to any potentially valuable area of human performance. (p. 261)
- Van Tassel-Baska and Little (2006) noted that gifted persons are capable of such performances because they are different from all other learners as they learn more quickly and are able to find, solve and act on problems independently, while having the ability to manipulate abstract ideas and make connections to understand the world through those ideas.
- Due to many challenges, parents of gifted children are often apprehensive about their ability to meet the challenges of raising a gifted child. Parents must be able to provide enriched educational resources, emotional support and understand the sensitivity of the gifted child, (Webb & Kline, 1993; Foster, 1985).
- Often gifted children are bored in school due to a lack of academic challenge. This can result in disengagement from academics and the development of bad study habits and even misbehavior (Rimm, 1995). In a home school environment, parents and/or guardians can provide challenges more easily and directly, as there is only one student present.
- At other times, gifted children struggle in traditional school settings due to affective issues. Giftedness may have a number of co-occurring affective characteristics, such as asynchronous development, introversion, perfectionism and emotional intensity (Silverman, 1993). Because of these traits, gifted students may be more susceptible to stress related to standardized testing or grades. Also, some of these sensitivities make gifted children more impacted by bullying. Usually students who undergo such affective stress have peer groups who help in the coping process. However, there are few gifted students in most schools, so the support group is inherently smaller. Homeschooling, especially homeschooling with a small group of gifted students, can help alleviate some of these affective issues and provide support.
- In part because of these challenges, home-schooling is a very good choice for the parents of the gifted child. A home-schooling mother of a gifted boy reports (Smith, 1991):
- Though their needs are similar to those of all children, in the gifted they are often more intense and seem more urgent. They are still children emotionally and need to be loved and held, played with and cared for according to their age and emotional development. This must take place while we continue to recognize and stimulate their active minds as they constantly search for questions and answers, new experiences and ideas beyond others of their physical age group. They are highly sensitive to parents and other adults, to our criticism, praise, indifference, care and honesty with them and others (p.1)

The core component of homeschooling is healthy parent-child interactions as a result of quality time spent together in academic and other co-curricular pursuits, creating a deep, sustained and nurturing bonding. As per Webb et al (2007), competence in interpersonal relationships is the most important factor in bringing up successful, caring, gifted children who will contribute significantly to society.

Family Issues

Parents are at times compelled to home-school children because of situations in life, e.g. temporary illnesses in a family, transportation/distance/convenience (National Center for Educational Statistics, 2008).

Home Schooling in India

Home-schooling is gaining ground in India. While there are no clear data on the number of students being taught at home, but the estimates are 15,000 families in the country home school their children. The reasons that parents give to home-school their children are such as lack of subject choices in the set curriculum especially for the children who are gifted and talented, high homework pressure, heavy bags and punishments etc which are quite different from the reasons people choose to home-school in the West. One of the others reasons the parents give in the Indian context is the disconnect between schools and work places, families, cultural context, social disconnect, local languages, societal wisdom and real –world issues. This disconnect does not prepare the children to face the world in terms of wise choices and skill sets. The parents feel in providing students with a sound education that they design will prepare their children in a better way to face issues in daily life. With all said the home-schooling scenario in India is still in the nascent stage and much needs to be done in terms of legislation and policy too.

Suggestions for Practice: Technology advancement & Alternative choices, Resources and Opportunities

The number of children being home-schooled has been on the rise as well as the choices for the parents. Earlier, the home-school movement was limited by the number of available studies, the qualifications of the parents and the limited resources available to educate a child at home. (Latham, 1998). Consequently, home schooling parents who have taken up the challenge of home-schooling their children are able to tap innumerable resources due to the advancement in technology, networks and web-based tools that were unthinkable earlier on (Martin-Chang, Gould, & Meuse, 2011). Data collected over a ten-year-old period from 1998-2008 (Hanna, 2012) showed very pertinent results in this regard.

Out of the 250 families surveyed in the year 1998, none of the families reported using online programs or supplemental

material, but in the year 2008, 70% of these same families were accessing materials through online programs. These options have opened newer avenues where not only is the parent-child team learning according to the requirements of the curriculum, but it is also being trained in the usage of the latest technology and skill sets as well. Online options have opened new avenues as both home-schooling and online learning focus on customizing learning according to the needs of the child in terms of learning styles, pace, special needs, flexibility and time.

Technological advancements and the profusion of online alternatives have helped the home-schooling movement. Parents have the option of choosing the curriculum through various instructional websites. Certain instructional websites have a separate section for home-schooling families. These sections are specifically designed with support tools such as lesson manuals, teacher support, educational counselors, videos, online resources and state resources (state policies and online learning) for parents to facilitate the educational journey of their child.

There are websites that offer reviews of different curriculum providers from various users. Parents are also able to teach subjects they are not familiar with or they find challenging through online education options (Andrade, 2008).

These help parents to make informed decisions and the right choice in curriculum selection. In addition to these websites, parents also have access to many online education websites such as Khan Academy, click Schooling.com, time4learning.com etc. These online learning websites have opened doors to immense possibilities for home-schooling parents and children through interactive content delivery. Blogs written by homeschooling parents also provide a deep insight to the day to day challenges, rewards and workings of home-schooling. For example, The Home-school Classroom, a collaborative blog gives insight about the different aspects of home-schooling such as child development, planning, organization in keeping with home schooling and even practical tips on how to set up homeschool classrooms at home (colorful pictures and space set-up for learning), printable worksheets, etc. In doing so, the parents have set up their own community of practice (<http://homeschooljourneys.com/the-homeschool-classroom>). And of course, parents can network through Facebook.

Conclusion

Home-schooling is a conscious choice on the part of the parents to educate their children in a way they think is fit. Parents feel that their children are better prepared because they have had much more adult interaction during their school years than most other students in government or private school systems. They have learned how to think

critically, speak winsomely and present facts and arguments to all ages. Government and college testing will prove their readiness academically as well. With the onrush of technology, the home-schooled students are connected to social media and learn all the present-day competencies with these interactions, but are taught how to use properly as well. In conclusion, when parents have the appropriate training for teaching their children at home and also count on strong support systems, there is a higher probability that their homeschooled children will achieve greater academic outcomes.

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