

Homeschooling Children Over the Radio in Developing Countries

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Abstract

In developing countries, factors such as cost, time, poor infrastructure, and the lack of quality teachers are just a few of the many reasons preventing children from receiving an education. A potential solution for children who simply cannot attend school for these reasons may be the use of the radio to facilitate homeschooling. This monograph investigates the potential for homeschooling over the radio by first uncovering and understanding the positives and negatives of homeschooling and also the positives and negatives of learning over the radio. The strongest criticisms of homeschooling include the lack of socialization and exposure to diversity, the lack of participation in the greater society, and the potential difficulty entering the mainstream. With the radio, the effectiveness of teaching via audio lacking any visuals is of concern as many children are viewed to be visual and tactile learners rather than auditory learners. By attempting to uncover and understand the learning preferences of children, this monograph investigates the potential for homeschooling children over the radio and identifies considerations to have when developing a homeschool program.

Keywords: Homeschool, Education, School, Children, Radio, Learning, Developing countries

In developing countries, education is usually not the highest priority for families who are struggling to survive and do not have reasonable access to it. However, education can be essential to their survival. According to a study by Lawrence Summers, the children of mothers who have completed primary education were about 40 percent more likely to survive to the age of five.¹ Also, During the 1990s, research found that HIV infection rates fell by half among educated women, while infection rates of undereducated women stayed the same.² Although education is extremely important for girls, according to UNICEF, issues such as safety, chores, pregnancy, marriage, work, and cost, as well as the lack of infrastructure and quality teachers can prevent them from attending school.³

A homeschooling program administered over the radio is a potential solution to this issue. It would not only eliminate safety issues regarding attending school, but would also be affordable, assure the quality of teaching, and children could tune in for class at night, reserving the daylight to help the family. This research monograph investigates the potential of a radio administered homeschooling program by understanding learning styles, uncovering what types of radio program activities would be good for retaining information, and discussing which programs would contribute to the moral and social development of children.

Ethnographic research and secondary research were performed in order to understand how information should be delivered in order for children to better retain information. The ethnographic research focused on; finding how students study, understanding their learning styles, and how students retain information. This was done through observation of students studying in various environments and by asking specific questions about their study habits. Three groups of learners were identified, characterized by the types of notes they prefer to take; massive highlighting and note taking, use of powerpoint slides and minimal notes, and lastly the interactive note card studier.

¹ Summers, Lawrence H. 1994. "Investing in All the People: Educating Women in Developing Countries." EDI Seminar paper No. 45. Washington, D.C.: World Bank.

² Vandemoortele, J., and E. Delamonica. 2000. "Education 'Vaccine' against HIV/AIDS." *Current issues in Comparative Education* 3.(1).

³ UNICEF Nigeria, Girl's Education, September 2007, Information Sheet, 1-2, http://unicef.org/wcaro/WCARO_Nigeria_Factsheets_GirlsEducation.PDF (accessed November 3, 2010).

In this study, the persona of the *visual learner* is associated with taking massive amounts of notes about what was lectured in class and highlighting just about every word in the textbook. They need to see, interact, and repeat in order to retain information in their memory. They identify themselves as visual learners. The next persona is the *powerpoint slide and minimal note taker*. This group is able to remember auditory information in their heads and only need concise notes to trigger the information for test and quizzes. Several of the members of this persona mentioned that they were more tactile learners, but after having to adapt to the school teaching environment, they were able to become auditory learners. The last persona is the *interactive notecard studier*. This last persona can be identified as tactile learners, needing to physically interact with the notes and simulate the test by putting the information on note cards and dynamically shifting them around to mock quizzes and test themselves on the information.

From this research, most of the students revealed that they were visual and tactile learners. They learn best in an interactive environment and will settle for visual information in order to commit it to memory. The key finding in this ethnographic research was that although most of the information delivered in class was auditory, students adapted by translating auditory into visual information by writing notes. No one I observed or talked to considered themselves as auditory learners.

Supporting my primary research findings, secondary research showed that auditory memory is systematically inferior to visual memory.⁴ In a study by Dunn and Dunn, they found that only 20-30% of school age children were auditory learners, 40% were visual, and that 30-40% were tactile/kinesthetic, visual/tactile, or some other combination.⁵ Also, Price, Dunn, and Sanders found that very young children are mostly tactile/kinesthetic, and it is only in fifth or sixth grade that most children learn and retain information through the auditory sense.⁶ Therefore, it is important to

⁴ MA Cohen, TS Horowitz, and JM Wolfe, "Auditory recognition memory is inferior to visual recognition memory," *Proc. Natil. Acad. Sci. U.S.A* (2009): 106.

⁵ Dunn, R.S., & Dunn, K.J. "Learning styles/teaching styles: Should they... can they... be matched?" *Educational Leadership*, (1980): 238-244

⁶ Price, G.E., Dunn, R., & Sanders, W. "Reading achievement and learning style characteristics." *The Clearing House*, (1980): 223-226

transfer the audio into visual/tactile learning for these children. An example of effective transformation of audio into visual/tactile would be IRI, Interactive Radio Instruction.

IRI, Interactive Radio Instruction is a radio program administered by the Education Development Center that is undergoing pilot testing in several countries. It is a daily 30 minute radio broadcast that improves educational quality and teaching practices in schools by promoting active learning. The lessons that these IRI classrooms learn are taught through local stories, songs, and physical activities. Evaluative data demonstrates that IRI had improved learning outcomes in all but 7 of the 37 classroom cases analyzed which show that radio instruction can not only be equal to teacher and book instruction, but be a better alternative in developing countries.⁷

This optimal learning by converting information from audio to visual/tactile may render homeschooling over the radio more effective in developing countries. Western homeschooling studies show that children are more likely to engage in activities that each through active learning if they are are homeschooled So if these children in developing countries are home schooled over the radio, they have the opportunity to actively learn over the radio by doing things, following adults around, exploring nature, and not be limited to the four-walled classroom. Homeschooling through the radio creates the opportunity to engage in these informal learning activities.

Another important topic to discuss about homeschooling over the radio is regarding social and moral growth. The ultimate goal of education is to prepare children for a better future, promoting health and advancement. Therefore educating children is not just about their academics, but figuring out what sparks their interest, teaching good behavior, and helping them find their role in society. Much of what children learn is from outside the classroom. In developed worlds these include parents, television, newspaper, and the internet which expose them to the larger world and supplement their academics. These considerations made me curious about who people felt were the greatest influencers in their lives and so I conducted a survey regarding these alternative sources of

⁷ Education Development Center, INC, Jennifer Ho, and Hetal Thukral, *Tuned into Student Success: Assessing the Impact of Interactive Radio Instruction for the Hardest-To-Reach*, <http://idd.edc.org/resources/publications/tuned-student-success-assessing-impact-interactive-radio-instruction-summary> (accessed November 1, 2010).

information and learning.

The survey consisted of four areas of interest: social/human relationships/self-identity, awareness of the world at large and its events, education/learning general academic knowledge, your job/major/responsibility. People were asked to identify who or what influenced them in these areas during specific periods of their lives. There were several key findings from this survey. In social/human relationships/self-identity, respondents reported parents as being their greatest influence in the beginning of their lives, school and friends influencing their adolescence, and TV/internet as influencing the later stages of their lives. This suggests that it is important to have an adult figure and friends in the earlier periods of their lives to teach them social norms and how to build relationships. For awareness of the world at large and its events, respondents reported that they did not start experiencing this until they were adolescents and that parents and TV were the main influences, which then progressed to news, school, friends, TV and internet. This makes sense because children first realize their immediate environment, and then expand their awareness through outside sources.

From this research, I inferred that children who would be radio homeschooled through this program would need the influence of parents or another adult figure, friends, and a healthy substitute for television. Even in western homeschooling, there is a presence of an adult figure to implement the program, television, books, and home school community groups where many homeschoolers gather for various activities.

This led to the idea that groups of children in the village who are individually homeschooled through the radio can gather for activities and community outreaches once a week. This ensures that the radio homeschoolers are keeping up with their studies, have a place to ask questions, and socialize with other children. Another realization from this survey was the need for moral and social education. Plays, stories, and community activities would be beneficial to radio homeschoolers in this regard.

In conclusion, the ethnographic research, secondary research, and surveys were successful in unveiling new issues and solutions for homeschooling over the radio. Three main findings of the

research in this paper suggest the need for active lessons, moral storytelling, and regular group radio homeschooling meetings to improve the effectiveness the radio for homeschooling.

The ethnographic and secondary research revealed that a majority of children are not auditory learners. However, this can be overcome by repeating information, engaging in songs and activities, writing down on paper, or by using any other method that translates audio information into visual or tactile/kinesthetic information. For primary school age children who learn tactically/kinesthetically, homeschooling poses the opportunity to be a more beneficial learning environment by breaking free from the traditional classroom.

Findings from the survey were that the presence of an adult figure, friends, and healthy storytelling are important for overall development of a child. There are children in developing countries do not have television, books, or positive adult figures in their lives. Radio programs such as plays and storytelling can deliver moral lessons where children can find adult figures and friends in the characters of the story. Additional content with adult figures and friends can increase socialization through the implementation of weekly homeschooler's group meetings, where they can gather to do activities, ask questions, take tests, and form a community.

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