**Distance Education in the Rural Communities
of Central Appalachia and Bangladesh**

One of the primary benefits of Distance Education is its ability to provide otherwise underserved populations with the opportunity to pursue their educational goals. While the basic premise of distance education institutions is the same, the systems design is influenced by the population served, history/reason and reasoning for its existence, the established (or desired) teaching and learning models, and technology. In rural communities, where poverty, isolation and inadequate infrastructure, is common, developing an effective distance education can be quite a challenge.

*Using comparison and contrast, we will take a look at two institutions that have been successful in their attempts to reduce* educational disparities in rural communities through *distance education. We will consider the economics, social and cultural makeup of the rural Central Appalachia (U.S.A.) and Bangladesh (Asia). We will examine the role that The Appalachian Educational Satellite Program and the Bangladesh Open University have played in these rural communities, including each organizations mission, reason for existence, system of organization, teaching/learning model, and technologies used. The paper will conclude with a summary describing the similarities, difference and future goals of each institution in the realm of distance education.*

***Regional Overviews***

***Central Appalachia***

*The Central Appalachian Region (or “White Ghetto”) of the United States is within a* 205,000-square-mile region along the spine of the Appalachian Mountains. It includes the entire state of West Virginia and parts of Pennsylvania, Maryland, Virginia, Kentucky and Tennessee. Forty-two percent of its 12,314,010 residents live in rural communities, compared with 20 percent of the national population. Once dependent on mining, forestry, agriculture, chemical industries, and heavy industry, the region lacks economic vitality and its’ largely homogenous citizenry face concentrated areas of high chronic poverty, unemployment, poor health, and severe educational disparities (Arc.gov, 2015). The median income in the Central Appalachian region is $28,531, which is two-thirds the national median. One-quarter of the region’s households have annual incomes below $15,000 compared to 16 percent for the nation as a whole.

The culture in Central Appalachia has been referred to as “closed door,” due to the level of intimate interactions of its citizens and isolation from outsiders. In Central Appalachia maintaining the status quo is the norm change is not desired. This dynamic is believed to have “evolved from both the physical and social isolation of the people. Central Appalachians tend to have strong family ties, be reluctant to change, distrustful for outsiders.

Historically, the education in Central Appalachia has lagged behind average literacy levels of United States. Almost 30 percent of its adults are considered [functionally illiterate](http://en.wikipedia.org/wiki/Functionally_illiterate) (Ncda.org, 2015) . Most of its residents are impoverished and have adopted fundamentalist and fatalistic religious ideologies that encourage acceptance of poverty and hardship as their lots if life (Pierce, 1995). Gender inequalities are commonplace. And, women are typically confined to the domestic sphere and those that do work do so on the periphery of the labor market, earning 64 percent of men (Oberhauser et al. 2005)..

**Bangladesh**

Bangladesh is in Southern Asia. It borders the Bay of Bengal, between Burma and India. Most of the country is situated on deltas of large rivers flowing from the Himalayas. More than half of its gross domestic product is generated service, with the other half of Bangladeshis being employed in the agriculture sector (i.e., rice production, garment production/exporting). According to CIA.gov, 40% of its population of 166,280,712 are underemployed, with many counted as employed working a few hours a week and earning low wages.

The culture in Bangladesh is a direct reflection of its largely Muslim citizenry and has resulted in a divide between Muslims and Hindus. As a whole, it is a patriarchal society. Family needs are placed above individual needs. Men are the authority figures and central decision makers. In contrast with women, they are freedom of movement and have open access to educational opportunities. Girls are considered a burden, have limited access to education, marry early (i.e., between 15 and 20, and are subject to household confinement.

The ethnic makeup of Bangladesh is 98% Bengali and 2% Other. The age and religious structure of Bangladesh is 56.8% (between the ages of 15-54) and Muslim and 89.5%, 9.6% Hindu and 0.9% other (Cia.gov, 2015). It is one of the most populous and poorest countries in the world. Many rural Bengalis live below the poverty line, with 29.9% living on under $1/day. Gender roles, early marriage, ill health, pregnancy, and cultural constraints on females act as barriers to women who desire education in this region.

**Need Based Intervention via Distance Education**

***The Appalachian Higher Education Network***

In 1998 the Appalachian Regional Commission (ARC) developed the Appalachian Higher Education (AHEN) Network. The AHE’s implemented distance education initiative to bridge the disparities between rural Appalachia and the rest of the nation (Ratliff, 2015). To negate the inherent constraints of geography, community colleges in rural Appalachia invested in personnel, technology, and infrastructure to improve educational opportunities in their service areas through online education (ARC, 2011). Eight state-based centers were established to provide training and mentoring in an effort to address social and emotional barriers to college; whilst telecourses and other educational programming were developed and delivered to multistate area along the Appalachian Mountains (Google Books, 2015) .Utilizing a management-by-mission approach, technical assistance, training and support teams were formed. To improve sustainability, the community-centered learning model was used (Cleveland-Innes & Garrison, 2010, pp. 120-121). An empathetic peer learning network was formed, whose job it was to provide encouragements to students who were unlikely to receive it from their families.

To expand the right to education in developing countries like Bangladesh education, Microfranchising is being used. Although this is a new phenom, Microfranchising is regarded as “The Next Big Thing.” The Youth Management Resource Center Initiative is a good example of how the Microfranchising being used to promote distance education in Bangladesh (YMRC). The YMRC model incorporates the Theories of Independence and Autonomy and Interaction and Communication. Villagers become trusted Microfranchisees (or educators) and make the rounds in rural communities providing rural villagers access to critical information and disseminating customized educational tools. Therefore, students who are able to take advantage of Microfranching opportunities are afforded freedom of actions and decision making and receive motivational supports which enhance rapport between the Microfranchisee, learner and distance education organization. Use of Open Educational Resources (OERs) by Microfranchees enable the creation of content adapted to specifically fit local conditions, cultures, interests, and languages. And offline local intranet (with a cache of useful resources uploaded flash drive with current content collected online), they trek back into the villages to share their new knowledge with women’s groups, agricultural cooperatives, and literacy classes.

**Summary**

In many respects, the culture that exists in Central Appalachia and Bangladesh are very similar. Gender bias and religion exercise a great deal of influence and result in women having limited access to educational opportunities. Although there was no mention of women being regarded as burdens, as they are in Bangladesh, there is little doubt that they’re contribution to the household is relatively limited. The attitudes and hindrances that exist have had deleterious effects on women in both regions.

The distance education systems developed by the AHEN and YMRC were both multidimensional and specific to the communities being served. In each case curricula, study materials (print and online) and appropriate delivery systems were implemented in a culturally sensitive manner. Each program provides students with access to a peer or counselor with whom they can freely dialogue for instructional and learning support. This is of import because social environment and cultural experiences influence the learning process (Peters, 1998, pp. 55-56). The use of Open Educational Resources in Bangladesh that can be adapted to the audience is a creative way of overcoming cultural and linguistic barriers. The outreach aspect of YMRC further demonstrated their recognition of the need to respect cultural norms. By utilizing women Microfranchees, they were able to reach homebound women who otherwise may not have had access. Home visitation is not an aspect of the system developed by AHEN.

**REFERENCES**

Ahmed, S., Adams, A., Chowdhury, M., & Bhuiya, A. (2000). *Gender, socioeconomic development and health-seeking behaviour in Bangladesh. Social Science & Medicine*, *51*(3), 361-371. doi:10.1016/s0277-9536(99)00461-x

Arc.gov,. (2015). *The Appalachian Region - Appalachian Regional Commission*. Retrieved 22 March 2015, from <http://www.arc.gov/appalachian_region/TheAppalachianRegion.asp>

Cia.gov,. (2015). *The World Factbook*. Retrieved 23 March 2015, from <https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html>

Cleveland-Innes, M., & Garrison, D. (2010). *An introduction to distance education*. New York: Routledge.

Google Books,. (2015). *Leading the e-Learning Transformation in Higher Education*. Retrieved 23 March 2015, from https://books.google.com/books?id=6jeFAwAAQBAJ&pg=PA6&lpg=PA6&dq=appalachian+educational+satellite+program&source=bl&ots=x9e0At36Z3&sig=nQVmkRyGe6byj53adySfcrTlQDI&hl=en&sa=X&ei=h08PVeySA4WMNrOqhMgC&ved=0CFcQ6AEwCQ#v=onepage&q=appalachian%20educational%20satellite%20program&f=false

Ncda.org,. (2015). *National Career Development Association | New Opportunity School For Women: A Unique Career and Education Program in Appalachia*. Retrieved 19 March 2015, from <http://www.ncda.org/aws/ncda/pt/sd/news_article/69382/_parent/layout_details_cc/false>

Oberhauser, Ann; Latimer, Melissa. (2005). EXPLORING GENDER AND ECONOMIC DEVELOPMENT IN APPALACHIA. *Journal of Appalachian Studies*. Volume 10 Number 3. Retrieved November 28 from Academic Search Premier.

Peters, O. (1998). *Learning and teaching in distance education*. London: Kogan Page.

Ratliff, V. (2015). *Online Attrition at a Community College*. *Digitalcommons.liberty.edu*. Retrieved 17 March 2015, from http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1787&context=doctoral