

Importance of School based ICT Curriculum Relations: The 'Shari'ah' Perspective

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ABSTRACT: In present times it is a universally accepted fact that ICT (Information Communication Technology) is the sole potent driving force behind every knowledge driven economy of the world. In order to effectively implement ICT in various fields, there is a dire need for the availability of proper well trained / committed ICT work force in a country. In Pakistan lack of interest of students in the field of IT coupled with the decline in the quality of output has compelled us to embark upon deliberating on this vital issue which confronts us. This paper delves in to different factors like curriculum, availability of resources, proper guidance and career counseling – the core issues affecting the role of ICT at school level in Pakistan. Data is collected from the existing students of Bachelor (BBA ITM, BBA Hons, BCS) and Master level (MBA ITM, MBATEM, MBA, MCS) programs of five different universities of Pakistan (two public sector and three well reputed private sector). It is observed that majority of the students hailed from remote areas of Pakistan having Urdu medium instruction background. With inadequate exposure of ICT at school or college level and maximum of their time was exhausted in developing basic level skill instead of preparing them for hi-tech industry. Moreover, it is observed that majority of the students are not aware of their objectives of the specific programs they are enrolled in and also about their future careers in these fields, simply due to nonexistence of career counseling culture both at school and college level

KEYWORDS- Solar Energy, Wind Energy, Hybrid Energy systems, VAWT, street lighting.

1. INTRODUCTION

The test of research in renewable energy micro generation technology is the lucky combination of efficiency. Solar energy is a major renewable energy source with the potential to meet many of the challenges facing the world. There are many reasons to promote its share in the energy market. This power source is increasing in popularity because it is versatile with many benefits to people and the environment.

Wind power is the conversion of Wind energy into a useful form of energy, such as using wind turbines to produce electrical power. Large Wind farms consist of hundreds of individual wind turbines which are connected to the electric power transmission network. For new constructions, onshore wind is an inexpensive source of electricity, competitive with or in many places cheaper than fossil fuel plants.

Both Sources are playing a vital role in our life. Both sources are available free of cost and the use of these sources does not affect on the environment.

Maintaining high levels of subjective well-being (SWB) is one important aspect of successful aging (Baltes & Baltes, 1990). Subjective well-being in the elderly is considered to be related with such factors as life satisfaction, morale and happiness. (e.g., Kai et al., 1991; McDowell & Newell, 1996). Considering the increased risks of losing health, competence, social network and income with age, one can conclude that older adults have lower levels of SWB compared to younger individuals. However, contrary to the expectations, a number of meta-analyses in this field have demonstrated that SWB does not decrease with age. Older adults have well-being no less than younger individuals. This paradoxical finding is widely expressed by global dimensions of well-being, namely life satisfaction and happiness. (Pinquart, 1997a; 1998). In order to interpret these counterintuitive results, new studies are needed to investigate the association between SWB and those aspects of life that show increased risk of loss and decline in old age (Pinquart & Sorensen, 2000). Subjective well-being is person's own evaluation of his/her life. This evaluation can be related to cognitive conditions like satisfaction with one's marriage, work, and life, while it can also be affected by ongoing situations (i.e., the presence of positive emotions and moods, as well as the absence of unpleasant effects) (Diener, Sapyta, & Suh, 1998).

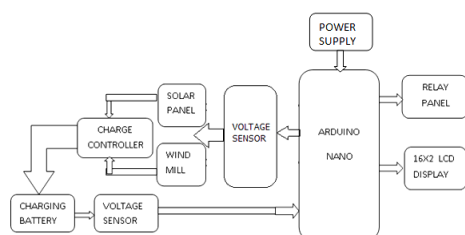
In gerontology, there are several ways to assess subjective well-being, for example, by measuring self-esteem, life satisfaction and happiness (Pinquart & Sorensen, 2000). Life satisfaction is one of the most important indicators for the positive effects of subjective well-being in older adults (Siu & Phillips, 2002). It is defined as an overall assessment of one's life including the current life (Bowling, 1990; Neurgarten et al., 1961). Living conditions and technology have advanced since the beginning of the 20th century, which brought in the prolonged average life expectancy. The average life expectancy increased by 20 years worldwide, reaching up to 66 years between 1950 and 2000. Another 10-year increase is expected by the year 2050 (United Nations, 2005). The elderly population is generally in a good physical health in USA, and the life expectancy was estimated as 75.2 and 80.4 years for men and women, respectively (Kung et al., 2008). However, a long life does not guarantee a satisfying life. Life satisfaction has been frequently examined in social gerontology (George & Clipp, 1991). Nonetheless, determinants of life satisfaction are still inconclusive (Chou & Chi, 1999). As the number of aged population has been increased by certain demographic shifts, factors effective on life satisfaction have gained importance.

The documented health benefits of social support may offer a promising avenue for reducing mortality and increasing life satisfaction among older adults. Indeed, there is a robust association between social contact, social support, health and well-being (House et al., 1988; Choi, 2001; Hilleras et al., 2001; Keyes et al., 2002; Landau & Litwin, 2001; Mroczek & Spiro, 2005; Pinquart & Sorensen, 2000; Zhang & Yu, 1998). The growing number of elderly citizens in the general population causes challenges to researchers, policy makers and societies. There is an increasing need for further empirical insight into the needs and functioning of these individuals as new regulations are required to allow effective service delivery to this population. Likewise, due to this growing number, new attitudes should be developed toward the elderly in today's societies (Aureli & Baldazzi, 2002). Studies on wellbeing and life satisfaction of the elderly have intensified in last three decades. Literature consistently emphasizes that life satisfaction of this population is a complex phenomenon influenced by multiple factors. One of the significant factors is the quantity and quality of a social network of loved ones such as spouse, adult children, grandchildren, relatives and neighbors. These sources of social support are considered to have vital impact on the elderly persons wellbeing and life satisfaction (Florence, 2001)

Objectives:

- In Remote areas implementing power systems units at each apartment.
- Multistoried buildings
- Homes, schools.
- Street lightings covering a large area.
- Off grid applications.
- Electric kettles solar vehicles
- Traffic signaling and in many applications.
- To obtain a maximum energy

Proposed Work:



To better understand the working of solar wind hybrid system, we must know the working of solar energy system and wind energy system. Solar power system can be defined as the system that uses solar energy for power generation with solar panels. The block diagram of solar wind hybrid system is shown in the figure in which the solar panels and wind turbine are used for power generation A solar panel is made up of solar cells or solar photovoltaic cells, and is used for converting solar energy into electrical energy.

The solar panels utilize Ohmic material for interconnections and external terminals. Thus, the electrons produced in the N-type material are passed to the battery through electrode and wire. From the battery, electrons reach p-type material, where these electrons and holes are combined. Hence, the solar panel connected to the battery behaves like another battery, and hence, is comparable to the two serially connected batteries. The solar panel output is electric power and is measured in terms of Watts or Kilo watts.

Wind energy is also one of the renewable energy resources that can be used for generating electrical energy with wind turbines coupled with generators. There are various advantages of wind energy, such as wind turbines power generation, for mechanical power with windmills, for pumping water using wind pumps, and so on. Large wind turbines are made to rotate with the blowing wind and accordingly electricity can be generated. The minimum wind speed required for connecting the generator to the power grid is called as cut in speed and maximum wind speed required for the generator for disconnecting the generator from the power grid is called as cut off speed.

Components Required:

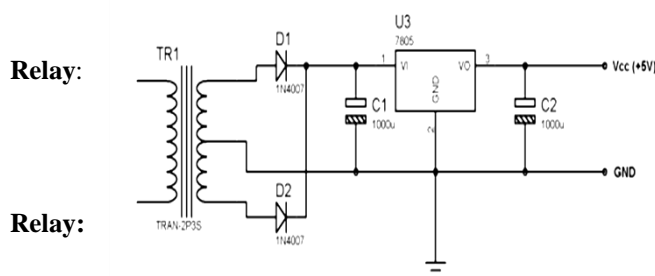
Arduino Nano:

- The Arduino Nano is a small, complete, and breadboard-friendly board
- based on the ATmega328 (Arduino Nano 3.x) or ATmega168
- It has more or less the same functionality of the Arduino Duemilanove, but in a different package.
- It lacks only a DC power jack, and works with a Mini-B USB cable instead of a standard one.
- The Nano was designed and is being produced by Gravitech.



Power Supply:

The microcontroller need +5V DC, these specifications dictate the use of a low-cost, ubiquitous linear regulator National Semiconductor LM7805. The LM7805 requires an input voltage of at least 7.5V in order to guarantee regulation, so the unregulated power supply should supply at least this voltage under worst-case current consumption, assumed to be about 200mA.



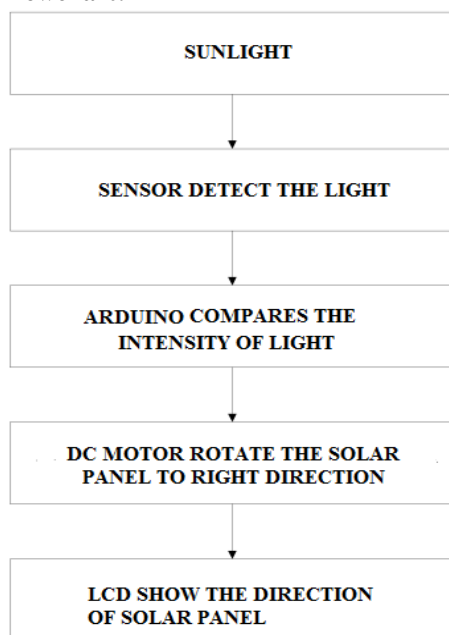
A relay is an **electrically** operated **switch**. Many relays use an **electromagnet** to mechanically operate a switch, but other operating principles are also used, such as **solid-state relays**. Relays are used where it is necessary to control a circuit by a low-power signal or where several circuits must be controlled by one signal.

Battery



- The battery can be mounted in any position.
- Have shorter recharge time.
- Maintenance free.

Flowchart:



Advantages:

1. This system having high daily electricity generation capacity, low fabrication cost, maintenance is low.
2. The generator doesn't use any fuel hence; it not produces pollution.
3. The hybrid energy system is based on free energy.
4. It ensuring adequate and affordable energy for all.

Applications

- Used in between highways as there is wide space for installation of our system.
- Power supply point is located below the system in order to charge any application. Here, we have considered a grass cutting application which runs on DC motor and battery.

Future Scope:

All portable grass cutting machines which runs on diesel and petrol costs more and are creating noise and air pollution. So, using this system, we can use a DC motor, and can charge the battery of DC motor using this system which is placed in between highways. By using this, fuel cost is eliminated, weight of system is reduces, no hard work for carrying by operator.

Now-a-days, electric vehicles are in growth of applications. Customers are turnings towards purchasing electric vehicles. Dubai and other countries are widely using electric cars. Tesla is one of most famous brand among providing electric cars. Thus in future, electric vehicle charging system is needed. So, using this system, we can built electric charging station.

Conclusion

- Wind energy and solar energy are renewable. They are non-polluting and zero emission new energies.
- The wind-solar hybrid streetlight system is an independent system based on of the best resource conditions.
- According to the wind power system structure, it has analyzed the wind electronic systems, photovoltaic electronic system.

REFERENCES:

1. Adams, B. (1967). Interaction theory and the social network. *Sociometry*, 30:64-78.
2. Adams, B. N. (1968). The middle-class adult and his widowed or still married mother. *Social Problems*, 16:50-59.
3. Antonucci, T. C., & Jackson, J. S. (1990). The role of reciprocity in social support. In B. R. Sarason & I. G. Sarason (Eds.), *Social support: An interactional view* (pp. 173–198). New York: Wiley.
4. Antonucci, T. C., Fuhrer, R., & Jackson, J. S. (1990). Social support and reciprocity: A cross-ethnic and cross national perspective [Special issue]. *Journal of Social and Personal Relationships*, 7(4), 519-530.
5. Antonucci, T.C. & Akiyama, H. (1987). Social networks in adult life and a preliminary examination of the convoy model, *Journal of Gerontology* 42(5), 519–527.
6. Antonucci, T.C. (1990). Social support and social relationships. In R.H. Binstock & L.K. George (eds.), *Aging and the Social Sciences*, 3rd edn (pp. 205–226).
7. London:Academic Press. Aureli, E., & Baldazzi, B. (2002). Unequal perceived quality of life among elderly Italians: Different satisfaction levels in selected spheres of life. *Social Indicators Research*, 60 (1-3), 309-342. Baltes, P. B., & Baltes, M. M. (1990).
8. Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Success/ill aging* (pp. 1-34). Cambridge, England:Cambridge University Press. Batson, C. D. (1998).
9. Altruism and prosocial behavior. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. II, pp. 282-316). New York: McGraw-Hill. Bengtson, V. L., & Kupers, J. A. (1986).
10. The family support cycle: Psycho-social issuesin the aging family. In J. M. A. Munnichs, P. Mussen, & E. Olbrich (Eds.), *Life span and change in a gerontological perspective* (pp. 61-77). New York: Academic Pres.