

THE IMPACT OF HEUTAGOGY EDUCATION THROUGH TELECENTRE IN SMART VILLAGE (SV)

Jalaluddin Abdul Malek

ABSTRACT

Heutagogy education through telecenters to produce SV people who are knowledgeable. Malaysia until 2015 were over two thousand telecenters as construction container SV. Among the three main types of telecenter operation is Mini RTC, 1Malaysia Internet Centre (P1M) and the Rural Internet Centre. Education in rural telecenter by year 2015 focusing on bridging digital divide program (BDD) such as computer education and Internet used. After year 2015, telecenter had focused on rural education to produce e-entrepreneur and smart society (SC). Educational method used is heutagogy as a value added method of cybergogy and synergogy. The general question is the extent of the impact of education heutagogy through telecenters can create a smart society (SC). This impact is seen based on the component of world view, knowledge and practices that are carried out by SC in SV. The result was the achievement of the SC community to be at a moderate level. The main factor is that their participation is still at a moderate level in education heutagogy in telecenters.

Keywords: heutagogy, telecenter, smart village, education method, digital divide

INTRODUCTION

The principle of this discussion is based on critical pedagogy epistemology (critical pedagogy) that drives radical education (radical pedagogy) (Nuryatno 2011). The main question organized by critical pedagogy is; Does rural education today gives space to the agency or the process of creative subjectivity formation? Rural education is an important aspect as a platform to accelerate the progress of villagers such as the facilities at telecentre, libraries and other guidance activities. Rural education can be in form of formal and non-formal. This discussion is closely related to the role of telecentres in rural education that has become a global development platform to hasten the presence of knowledgeable rural communities. In this era of transformation, rural development is recommended to focus more on empowering the rural communities. Villagers no longer need to be dependent communities. Through knowledge enrichment, the villagers were able to accept development, become proactive participants, capable to compromise and eventually become self-reliant rural communities in development (Freire, 2005).

Smart Villages (SV) are villages equipped with advanced technologies such as ICT and solar technology. The components of SV development are smart economy, smart society (SC), smart environment, smart grid, smart utility and smart education (Viswanadham 2010). The central focus of SV progress starts with inclusive SC development with other aspects of rural development. Among the basic amenities are telecentres and wired or wireless Internet access.

Heutagogy education is an independent self-learning. SV communities themselves want educationself-betterment, family and community members with specific professional guidance. Heutagogy education is the most suitable method to be used in rural education program because it is not bound by time, space, place and group. It is the basis to enhance the expansion of knowledge-based SV primarily in supporting the educational programs in telecentres. It can also assist in knowledge transfer to the villagers for the sake of political and administrative development, economic, demographic, socio-cultural, infrastructure and infostructure, adaptation and technological innovation, advancement of education, legislation and enforcement, and the environment (PEDSITELE) in telecentres.

Telecentre is a one-stop centre that provides ICT and internet service that serves as a centre of knowledge, guidance, information and data as well as electronic network for rural communities. Telecentre contributes to continuous sustainable progress of SV particularly in the aspects of socio-economy, socio-politic and socio-cultural development. Telecentre has various names namely mini-RTC and the 1Malaysia Internet Centre (P1M) in Malaysia, Public Internet Access Centre (PIAP), Village Knowledge Centre, Community Technology Centre (CTC), Community Multimedia Centre (CMC), Multipurpose Community Telecentre (MCT) and Community Service Centre (CSC) (Harris 2001).

RURAL EDUCATION ISSUES IN SMART VILLAGE (SV)

Public education for SV communities is expected to create a rural society that able to explore, seek knowledge and apply existing knowledge. Villagers are also supposed to be able to innovate and use their innovation for their own growth. They should also be able to take examples and new concepts for development, adapt things that can bring values learned and eventually able to design new techniques and technologies for the betterment of themselves, their own groups and communities. The hopes and aspirations of rural communities are possible to achieve because the SV development is focusing on empowering the villagers. Among the objectives of SV is to build a smart rural community (smart society-SC) (Viswanadham 2010).

In order to build SC, telecentre is the main facility of SV. Telecentre facilities in SV are usually provided by the government, private sector, NGOs and individuals. Telecentre facilities run by individuals for profit are called Cybercafe. SV Telecentre such as Mini RTC and 1Malaysia Internet Centre that are funded by the government has a special education program to produce SC. Among the educational programs at telecentres are e-government, e-business counselling, innovation and creativity supervision, publishing and broadcasting, processing and packaging of rural products along with e-marketing guidance including methods of e-payment and e-banking. All those programs are aimed at making the villagers as SC that is capable and self-reliant in improvement. SC that is capable of giving back to the development of PEDSITELE (Jalaluddin Abdul Malek & Zurinah Tahir 2016).

However, the question arises to what extent does heutagogy education could reach to taxonomic intelligence? The extent to which the population is able to reveal the appropriate rural development methods? From the humanity perspectives, how far the villagers are competent to use interpersonal and intrapersonal communication intelligence for the betterment of PEDSITELE? To what extent does the constructs of SC society through heutagogy education in

telecentre is able to produce an active, proactive, able to construct own knowledge, develop new ideas and sustain for current and future progress.

Heutagogy education method was introduced as a step-forward to create SC community in SV development. Heutagogy education focuses not only in the empowerment of taxonomy and humanity, but also organizing a transformative education for SC in which disclosing SC to cases from the aspects of worldview, knowledge, and best practices. This means that the SC society is bound to be competitive and independent in PEDSITELE growth. Therefore, heutagogy education use multimedia learning approach by using visual and auditory teaching tools such as video, computer, information and communication technology (ICT), bio-informatics technology. Multimedia learning in telecentre emphasizes on the principles that determine the effectiveness on the use of multimedia in learning.

Emphasis is given on SC society's ability to use both channels of visual and auditory in information processing for SV development. The vital key of success in heutagogy educational approach is to have telecentre with extensive ICT facilities, firm management of funding sources, and local champion in building SC. The most important factor for SV residents is to have the will and high determination to become SC. Only if the above factors exist, the development of independent SC that can contribute to the development of SV will be effortlessly realized.

EDUCATION OF SMART VILLAGE FROM PEDAGOGY TO HEUTAGOGY

In the world of inclusive education, diverse types of education were organized. It depends on the nature, necessity, technology and benefits to be achieved. Education system has actually existed before the industrial and political revolution in Europe. Islamic civilization is among the earliest civilization pioneered the education industry, though not for commercial purpose. However, in this discussion, the changes of education industry refers to the progress of revolution industry since the 1st(1.0), 2nd (2.0) and 3rd (3.0) as well as the impact of the fourth industrial revolution 4.0 (Figure 1). The impact on the existence of new educational methods is parallel with the changes in those industrial revolutions, without neglecting the earlier education method (pedagogy), giving additional value to existing methods and approaches suitable for audiences that undergone education throughout the current development.

Pedagogy is a method of education that existed in the days of the industrial revolution 1.0 and 2.0. Pedagogy is the science and art of education that refers to specific teaching theory. Modern pedagogy is influenced by the development of industrial revolution with the hope that education need to be systematic in creating an understanding based on science philosophy in order to integrate existing knowledge with new knowledge. Career as an educator is a practitioner of pedagogy. Educator is not only served in schools but also in retirement homes, prisons, orphanages, and refugee centres. They are often recognized as social pedagogues because they deliver knowledge to society (Carrier & Moulds, 2003). In rural development, the pedagogical approach is an external factor that triggers the growth of rural areas. The methodology of pedagogy is the initial approach in rural education, especially the eradication of illiteracy. To date, pedagogical methods are still being used in rural development according to suitability. For example, assisting in educational program at telecentre for aboriginal children

that are reluctant or afraid to go to school. Pedagogical institutions such as schools also practice social participation in improving rural society. For instance, school acts as a free tuition centre to help poor children to learn and excel in examinations. The role of telecentres like Mini RTC and P1M have tuition-based pedagogical activities for the children to be success in their examinations. Telecentre is also used by the children to find information to do their homework. Early education i.e. children pedagogy also use Mini RTC to introduce computer technology to children from kindergartens and nurseries.

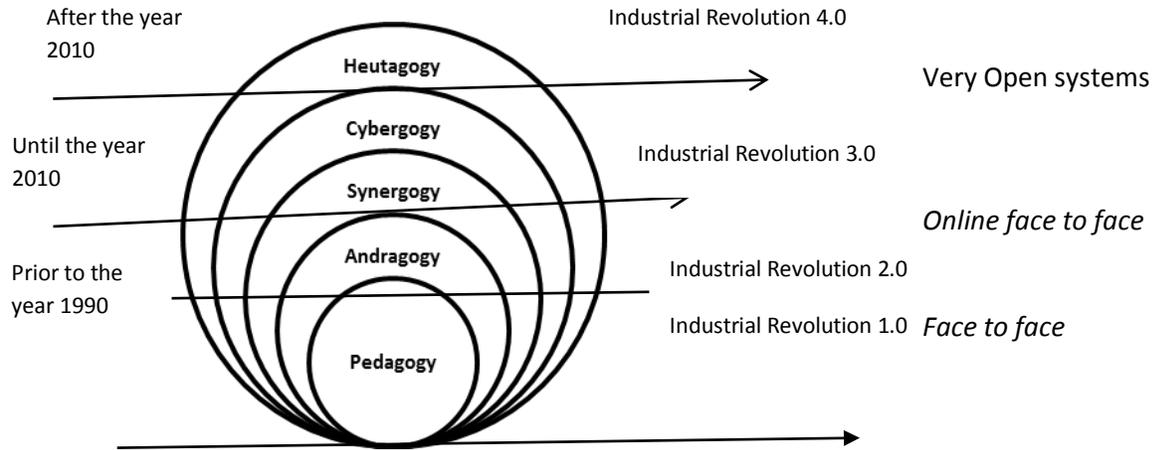


Figure 1: Industrial Revolution and Education Revolution

Source: modified from Toffler 1990, Chapnick & Meloy 2005, Collins & Halverson 2009

Andragogy is a method of education that existed during industrial revolution 1.0 and 2.0. Andragogy views on how adults go through learning process i.e. implementing education experience for adults (Hase& Kenyon 2001). Andragogy theory applies andragogical principles and practices, derived from the unique adult characteristics as students. Andragogy approach has been enlightening rural developers that endogenous factor (internal strength) of the villagers is the key factor in rural development apart from exogenous factors (Table 1 and Table 2). Andragogy is an effective strategy in equipping the rural society to be literate in agriculture and business, technology, entrepreneurship, politic and development. Education on communication skills of rural adults is an example of andragogy approach, specifically to expose knowledge of socio-economic development, government policies, and the current issue of rural development through the use of radio, television and other audio-visual tools.

Synergogy is an education method that existed during industrial revolution 3.0 and was primarily introduced in 1984 by Mouton and Blake (1984). It is also known as Ergonagy approach of network ties between pedagogy and andragogy approach (Kazutoshi& Evers, 1999) (Figure 1). Synergogy is defined as a systematic approach in learning where members of a small team learn from each other through a structured interaction. As a result, the idea of synergy in learning, challenges and excitements created through real social situations and the need to learn and knowledge. The preparation of educational materials, knowledge resources, and records can be gained as a team (Mouton & Blake 1984). Principles of synergogy are adults are competent in knowledge and analysis, willing to share and exchange information and knowledge with others and often practice self-learning. The learning process can take place in formal, informal and non-formal setting. Synergogy approach is executed in Malaysia for the success of *Gerakan Desa Wawasan* (Vision Village Movement) and *Gerak Daya Wawasan*.(Vision Village Empower Movement) It also aims to encourage active participation of people in rural development. The form of participations is in groups either for visiting and training (2L), guidance at the farm, and guidance at the laboratory. Synergogy approach enlightens the rural developers that the combination of exogenous and endogenous factors in rural development is very important for rural society development (Table 1 and Table 2).

Cybergogy is a method of education that existed in the days of the industrial revolution 3.0. The period was called the era of globalization through the rise and progress of ICT in which the world is borderless of the concept of space limitations, cultural and beliefs constraints, and nation boundaries (Wang 2008). The use of ICT has created a new teaching and learning concept named cybergogy. One of the key elements is to combine the basic of cybergogy pedagogy, andragogy and ICT in reaching a new learning approach (Carrier & Moulds, 2003). Cybergogy focuses on helping adults and young people to learn easily through virtual environment. Cybergogy education strategy is a learning environment using a virtual interface for the advancement of cognitive, emotional and social (Figure 1 and Figure 2). Cybergogy model is recognized as an innovative model for instructional design using ICT and cyberspace as the telecentres premise, cybercafes and other computer centers (Wang & Wang Kang, 2006 and 2008). Cybergogy learning encourages adult students and children to use computers and internet to obtain module, information, reports and any kind of reference on the rural progress that can be used to facilitate PEDSITELE. The learning outcomes of cybergogy (on-line) are unpredictable but very beneficial, especially as a medium for enhancing knowledge of the rural population. Based on Cybergogy learning method, rural developers realize that the neo-endogenous and exogenous are

closely significant to develop rural areas rapidly in terms of human capital and social capital (Table 1 and Table 2).

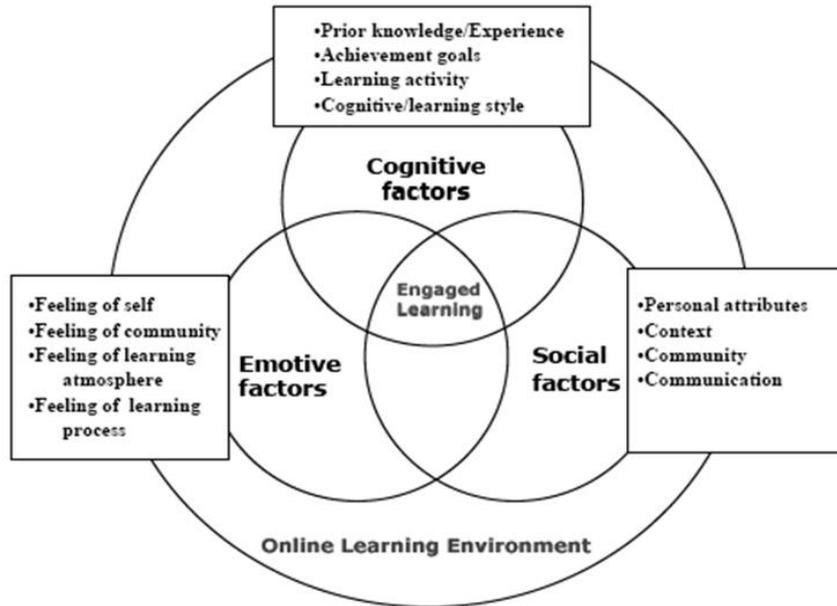


Figure 2: Cybergogy Education

Source: modified from Carrier & Moulds 2003, Wang & Kang 2006, Wang 2008

Table 1: Principles, scope and focus of Exogenous Development Model, Endogenous, Neo Endogenous and Neo Exogenous

Item/Method	Exogenous	Endogenous	Neo exogenous	Neo endogenous
	Sustainable	Sustainable	Established	Established
Basic Principle	Focuses on economy	The importance of local capital, human capital and social capital	Interests of collective cooperation from all stakeholders e.g. Blue Ocean Strategy	The importance of cooperation, networking, and cultural actors and society
Dynamic Strength	urbanize rural villages as hallmarks of rural development	Local and enterprise initiatives	latest technology, the most advanced and innovative	Local initiatives and capabilities of the actors involved with development
Functions of Rural Area	Production of food grains and food products for urban market	service-based Economy	Products-based economy and services in line with technological advances	All economic activities based on innovation empowerment and actors network in the

				development cycle
Focus of Development	Modernization of agriculture, farmers' skills and capital mobility	Community empowerment, including skills, institutions, infrastructure and related factors	digital connections and digital opportunities	Matured in taking digital opportunities. Empowerment of human capital for sustainable, resilient and high competitiveness on par with economic progress

Source: modified from Jalaluddin Abdul Malek and Zurinah Tahir (2016)

Heutagogy is a self-education method that existed during the fourth industrial revolution 4.0. Heutagogy method is not only driven by advances in ICT, but refers to the self-ability of rural society trying to grab the opportunity to gain knowledge and social networks through the advancement of education. Education heutagogy is a concept created by Stewart Hase Southern Cross and Chris Kenyon University in Australia that highlights on self-directed learning (Hase&Kanyon 2013). Heutagogy is an added value to pedagogy, andragogy, synergogy, and cybergogy (Table 2). Heutagogy provides distinct emphasis in learning, how to learn, learn to create chances of universal progress, and not a linear process in which the students themselves determine the direction of their progress (Balshake 2012). Heutagogy also requires education initiatives including students' upgraded-skills in learning either through formal, informal and non-formal (Figure 3). Unlike andragogy which focuses on structured education, heutagogy unites all learning contexts either structure, process (human agency), and the cultural environment.

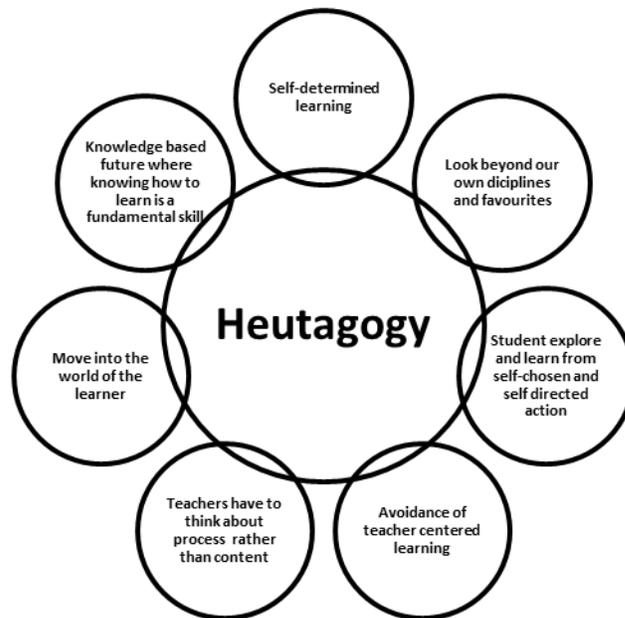


Figure 3: Heutagogy Education

Source: modified from Hase & Kanyon 2012, Hase & Kanyon 2013

Heutagogy education in telecentre is to produce a self-reliant rural society in PEDSITELE development, including technology innovation. The main goal of the villagers not only acts as a recipient of development, but also to participate pro-active in consensus building. As the outcome, they can contribute their abilities to develop SV and be a SC community that is capable to design with new discoveries for the advancement of their own village. Education heutagogy forms a settled villagers, become local champions and skilled in knowledge adaptation and the creation of new knowledge. Moreover, it creates an efficient society of creating original works and produces innovative procedures as well as using multiple intelligences independently as personal and interpersonal intelligence. Villagers that follow heutagogy education are able to analyze, understand concepts, and synthesize existing experience and knowledge in a creative and innovative way thus producing new knowledge. To conclude, heutagogy approach is a high level self-learning for rural people where they are trained to understand problem solving from the aspects of heuristics, meta-cognitive skills, knowledge, creativity, innovation and collaborative.

DIFFERENCES OF PEDAGOGY EDUCATION TO HEUTAGOGY FOR SMART VILLAGE

The differences between pedagogy, andragogy, synergogy, cybergogy and heutagogy and variables size are summarized in Table 2. The differences are viewed from the aspect of methods and characteristics of education, level of educational progress associated with the current changes, as well as the size of variables which are the impacts and KPI (key performance indicators) for each educational approach.

Although there are differences in the maturity of pedagogy, andragogy, synergogy, cybergogy and heutagogy, it depends on the educators and the one to be educated. Rural communities have various layers of society and its achievements. This means that all approaches to education have the opportunity to work, but depending on the progress of each individual in the community concerned. Telecentres usually visited by various segments of society, whether rural society itself and the outside world. The society is divided into elderly, senior adults, women, youth, teenagers and children. In terms of living standards, a majority of them are from low-income and lower middle, while the rest are from middle and high income. This means, in enhancing the villagers through the program in telecentre, there should be a special module upon demands either basic, intermediate and advanced level. These three modules comprise of different educational approaches which are pedagogy, andragogy, synergogy, cybergogy and heutagogy. Each facilitator, counsellor, coach, local champions and telecentre managers that wants to hold a program of villagers' empowerment need to be smart in dividing the participants according to the module stages. If it is done, the process of enriching the villagers to SC society will be easily accomplished.

In conclusion, it is clear that heutagogy education is advanced and matured enough to be introduced to the rural population, especially for the success of rural transformation program. Heutagogy education requires a human capital that is independent and a proactive social capital. Rural transformation program (RTP) in Malaysia intends to produce a rural community that does not rely on the government alone. The implementation of rural development under the National Blue Ocean Strategy (NBOS) demanding that Rural Transformation Centre (RTC) and Mini RTC to be the main premises in executing heutagogy guidance for rural society to become a

knowledgeable SC. The development of SC aims not only creating a high-income household, but also contributing back to their community development.

Table 2 : Differences on Characteristics and Education Methods

Types of Pedagogy	Methods & Characteristics	Level	Variables
Pedagogi	-dependent -teacher determines -institutions and structured -exogenous	Level 1 - Basic	-exam oriented -psycho motor -basic knowledge -discipline oriented -read, write and spell -draw, interpret
Andragogy	-dependent & independent -single-loop learning -teacher guided – linear design -self learning -group learning -endogenous	Level 2 - Mature	-knowledgeable -applied knowledge -share experience -competency development -creative -positive thinking
Synergogy	-dependent & independent -learn and training -less teacher guided -group networking -neo-endogenous	Level 3 - On Progress	-active participation -technical self-learning -train as trainer -creative and proactive -between pedagogy and andragogy
Cybergogy	-independent learning -online learning -networking -everywhere-loop learning -less facilitator or teacher guide -neo-exogenous + neo-endogenous	Level 4 - Advanced	-proactive participation -hard and soft skill learning -applied and share knowledge -self train -creative and innovative -knowledgeable and up to date
Heutagogy	-independent learning -double-loop learning -capability development -non-linear design and learning approach -leaner directed -Know-what + Know-why + Know-how -gabungan exogenous + endogenous + neo-endogeneous + neo-endogenous	Level 5 –Most Advanced	-collaborative abilities -learn negotiating and communication -self-sufficient and self reliance -global competence -responsive, relevant and reference -high degree of self – efficacy -expert problem solving -potential to learn in novelty situations

Source: modified from Mouton & Blake 1984, Carrier & Moulds 2003, Wang & Kang 2006, Wang 2008, Hase&Kanyon 2012, Hase&Kanyon 2013, Jalaluddin Abdul Malek&ZurinahTahir 2016

THE IMPACT OF HEUTAGOGY EDUCATION TO SV VILLAGERS THROUGH TELECENTRE PROGRAMS

Background - The 21st Century Rural Development in Malaysia aims to bring rural communities that are developed from the side of human and social capital. The focus of rural development is not only on the questions to raise revenue, well-being and improve the life quality of the villagers. The focus of 21st Century rural development also intends to increase empowerment and competitiveness of the villagers so that they can be independent and able to contribute back to local development. Heutagogy education approach is expected to accelerate the empowerment process of rural communities so that the impacts of rural development are more established. Among the facilities in the rural areas to empower the SC established are empowerment programs at the Rural Transformation Centre (Rural Transformation Centre). RTC complex is a one-stop centre that provides a range of services under one roof. Among the services done by RTC is providing rural education program to empower heutagogy-based education PEDSITELE in telecentre to villagers around 50 kilometers radius. Three main objectives have been identified through heutagogy education approach. The first objective is to identify the effectiveness of RTC implementation initiatives and telecentre services to the rural community around. The second objective is to identify the role of telecentres in socio-economic development of rural communities. The third objective is to identify measures that can be taken to improve the effectiveness of telecentres to form a more suitable SC Society with the use of Heutagogy approach.

This study viewed the impact of heutagogy education on RTC Perak located in Gopeng, Perak. RTC Perak is located in a strategic area and is surrounded by countryside and has a number of growth centres in the surrounding villages. Meanwhile, the telecentres in RTC are also a gathering place for local people to learn ICT. The existence of telecentres have given positive impacts economically or socially to the local community. The facilities at telecentres are supported by the continuous activities of RTC management such as computer literacy program, literacy, internet, counselling and agriculture, livestock and fisheries, coaching e-entrepreneur, coaching e-marketing, packaging and processing of rural products, as well as providing advice to progress PEDSITELE community village.

Method - The impact study of heutagogy education involves all levels of society consisting of the heads of households, adult women, children, high school students, youth, women and men aged 18 to 35 years. This study used quantitative method. The instrument used to collect data is survey form. A total of 297 questionnaires were divided into several target groups of women (52 survey forms), traders (47 survey forms), visitors (50 survey forms), heads of households by (56 questionnaires), students (32 survey forms) and youth (60 survey form). Each survey forms is distributed to the group according to the study area. Sample was chosen through free random sampling but aimed at target groups interviewed at the village area around RTC and those visiting the RTC.

Results and discussion- the RTC Perak especially in telecentrecan help local community to improve their skills through programs organized by telecentre. Many participants took the opportunity to gain knowledge and social networks through the advancement of education learned at the telecentre under nine initiatives. These nine initiatives inclusive of skills training

for the rural community, the use of the 1Malaysia information kiosks to get the latest information, guidance on high-value agriculture, guidance and facilities of agro-food products processing, guidance on supply chain management of agricultural, livestock and fisheries, cooperation with the universities for villagers' training, guidance and food safety and pharmaceutical services, conduct financial supervision for rural entrepreneurs. The last but not least is initiative in mentoring program and rural tourism marketing.

This study revealed that respondents especially the women had the highest number of 61.5% whom agreed on training and courses provided by the telecentres greatly enhance skills and knowledge of the local community. However, 28.6% of the respondents disagreed with activities and programs organized by the RTC in telecentre helped in improving their knowledge and skills. Meanwhile, visitors and traders recorded same percentage of 9.9% respectively disagreed and youth 1.7% disagreed. The RTC should consider this matter seriously since many respondents among the traders were not satisfied with the mentoring program at RTC. The business community is the people that are innovative, in need of latest knowledge and skills. Therefore, heutagogy educational approach should be further enhanced by the RTC management in their counselling programs.

With the respect of adequate training and courses provided by the RTC, 56.7% of the respondents were disagree, especially the youth, followed by dealer groups with 43.6% and visitors with 10.9%. Meanwhile, respondents from the head of the household stated that the existing programs are adequate enough to enable them improving their existing skills and knowledge. Based on these findings, RTC guidance program through the use of heutagogy approach should be extended to all rural communities in need. The management of RTC should increase the number of courses and program services according to the demand of the target group. Rural education program with heutagogy based approach is essential to be exposed to rural communities for them to become self-reliant and sustainable SC. Knowledge developed from diverse program through heutagogy approach will empower the aspects of indigenous and neo-indigenous villagers whom independent and capable of contributing to a sustainable development.

In regards to the appropriateness of programs and courses at RTC whether they meet the needs of the local community, 53.6%, of the respondents from the head of household (KIR) agreed that it complies with the requirements of target group. Some of the youths and traders with 60% and 45.5% respectively stated that the existing courses and programs do not meet the requirements of the target group. They also propose to the RTC management to include them in meetings or workshops to determine the types of programs and courses to be held. This is to ensure that guidance and services programs at RTC meet the demand of the target group in rural communities. Participation and cooperation from rural community is vital for the development of heutagogy agenda and education. Mentorship programs and services in RTC are the exogenous and neo exogenous factors in creating a knowledgeable, ethical and high moral value, competitive and competent SC community. Thus, the provision of programs and services at the RTC should be in accordance with the requirements and needs of all society groups to ensure that the heutagogy approach used is effective.

Besides that, the analysis of increasing the rural education access in RTC for rural community around a radius of 50 kilometres. Results of the analysis showed that a lot of improvements should be made as the numbers of respondents whom agree and disagree are slightly balanced. These include youth (63.3%), visitors (47.3%), and traders (40%). On the other hand, respondents that agreed comprised of women (57.7%), households (55.4%) and students (29.1%). The important factor to improve the participation of rural communities in heutagogy- based rural education is through easy access to education. The awareness of this easy access to education is a step forward to develop activities and services from RTC to mini RTC. The effort taken by RTC management has enabled heutagogy educational approach to be expanded to the nearest areas accessible by the rural community.

Therefore, participation readiness and proactive attitude of the rural community towards the counselling programs and services at RTC and Mini RTC is an important factor for the success of heutagogy-based education. This study found that indigenous and neo indigenous factors are the important factors of the achievement on rural education through heutagogy approach. This clearly denotes that educational accomplishment is highly dependent on the seriousness individuals and communities to participate and cooperate with RTC management.

Nevertheless, majority of the respondents only visited and used the facilities at RTC in which the telecentre for only 5 times a month. The household group visit to RTC is at the average of only one or two times per month (67.1%). The respondents from the traders and women

While respondents from the group of visitors (63.7%) and a group of women (53.9%) visited at least a telecentre within a month. Similarly, respondents from among traders (47.3%) and youth (16.7%) on average than they were just a telecentre five or less in a month. Only 20% of respondents in the youth group and 9.6% of female respondents use telecentre regularly which is about 20 times over the past month. From the findings of this analysis, it is concluded that the surrounding community telecentre using RTC still less and less follow the programs that are held by the management of the RTC. This is due to the latest development of the majority of respondents already have a smart mobile phone that has a wireless internet can access information anywhere. They no longer need to telecentre to use the internet.

However it is time management RTC devise a system of village self-education by heutagogy methods that use the concept of online learning and lifelong learning. This means that self-education and accessible village can be contacted at any time. Indirectly with the added value of village self-education medium (heutagogy) online learning and lifelong learning, the participation rate in the rural community of scientific programs and services by increasing the RTC. Ultimately the goal of building a society as SC SV becomes faster and easier.

CONCLUSION

Heutagogy educational impact through telecentre for the advancement of smart villages (SV) can be successful when the rural society of SC is realized. The establishment of village communities through heutagogy educational approach is fundamental in order to produce a more independent SC society, thus able to contribute back to the development of PEDSITELE in SV. Educated

people are easily formed into SC. RTC especially rural education through the use of facilities telecentre very important that rural communities are able to build their own SV. The goal of the SC's independence can ensure the survival of future generations so that the rural population is no longer a society dependent and passive. In addition, cooperation between all stakeholders is indispensable to sustainable development can be achieved with SV easier. Similarly, the village self-education (heutagogy) need to be flexible in his capacity as a container forming SC. Heutagogy methods can be combined with existing methods of pedagogy, andragogy, synergogy and are thus cybergogy.

REFERENCES

- Balschke, L. M. 2012. Heutagogy and lifelong learning: A review of heutagogical practice and self-determined learning. *The International Review of Research in Open and Distance Learning*, Vol. 13(1): 56-71.
- Carrier, S. I., & Moulds, L. D. 2003. *Pedagogy, andragogy, and cybergogy: exploring best-practice paradigm for online teaching and learning*. Sloan-C 9th International Conference on Asynchronous Learning Networks (ALN), Orlando, USA PPT
- Chapnick, S. & Meloy, J. 2005. *From Andragogy to Heutagogy: Renaissance e-learning: creating dramatic and unconventional learning experiences*. Essential resources for training and HR professionals. John Wiley and Sons.
- Collins, A. & Halverson, R. 2009. *The digital revolution and schooling in America*. New York: Teacher College Columbia University.
- Freire, P. 2005. *Pedagogy of oppressed*. New York: Continuum.
- Harris, R. 2001. Telecentres in rural Asia: Towards a success model. Conference Proceedings of International conference on Information Technology, Communications and Development (ITCD 2001), November 29-30, Kathmandu, Nepal.
- Hase, S. & Kenyon, C. 2001. Moving from andragogy to heutagogy: implications for VET', *Proceedings of Research to Reality: Putting VET Research to Work: Australian Vocational Education and Training Research Association (AVETRA)*, Adelaide, SA, 28-30 March, AVETRA, Crows Nest, NSW.
- Hase, S. & Kanyon, C. (eds.) 2013. *Self-determined learning: Heutagogy in action*. London: Bloomsbury.
- Jalaluddin Abdul Malek & Zurinah Tahir. 2016. Talk Approach on Rural Transformation 21st Century, Between Sustainability and Sustainable. The 10th International Malaysian Studies Conference (MSC10), Globalization and Regionalism: Malaysian in ASEAN Community Building. 15-17 August. Universiti Malaysia Sabah.

- Kazutoshi, T. & Ever, M. B. 1999. Ergonagy: Its Relation to Pedagogy and Andragogy. Paper presented at the Annual Meeting of the Comparative and International Education Society, Toronto: Canada (April 14- 18). (ERIC Document Reproduction Service No. ED438464).
- Mouton, J. S. & Blake, R. R. 1984. *Synergogy: A new strategy for education, training, and development*. San Francisco, CA: Jossey-Bass Pub.
- Nuryatno, M. A. 2011. *Critical Education*. Yogyakarta: Resist Book.
- Toffler, A. 1990. *Powershift: Knowledge, wealth and violence at the edge of the 21st Century*. New York: Bantam Books.
- Viswanadham, N. 2010. *Design of smart villages: India moving up the service chain*. Hyderabad: Indian Business School.
- Wang, M. J. & Kang, J. 2006. Cybergogy of engaged learning through information and communication technology: A framework for creating learner engagement. In D. Hung & M. S. Khine (Eds.), *Engaged learning with emerging technologies* (pp. 225-253). New York: Springer Publishing.
- Wang, M. J. 2008. Cybergogy for engaged learning. *Journal of Open and Distance Education in China*, 14(2), 14-22.

Jalaluddin Abdul Malek
School of Social, Development and Environmental Studies
Faculty of Social Sciences and Humanities
UKM, Bangi.
jbam@ukm.edu.my