The Development and Application of E-Learning on Elderly Education in Taiwan

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Abstract
The United Nations named the 1999 was the first International Year of Older Persons (IYOP) in human history and issued the relevant bills of older persons' rights. In the research of the Education Institute of UNESCO, if the older persons participated more learning activities, they will more adaptive in their community. In addition, it will more helpful for their health and peacefulness. It is a worthily important topic that how to apply the varied informational e-learning products to make the older persons can healthy, suitable and safe to enjoy their life. However, some of the current interface designs of informational e-learning product came from the design principle of computer operational interface. That will make some informational digital products are difficult to use (Brewster, 2002). Although informational digital techniques have potential for the older persons to participate more social and economic activities, the older persons will have barriers in operating informational e-learning products. Because their functions of physiology and psychology are getting degenerate to make some obstacles, it will easily form the barriers for the older persons. Hence, regarding to Taiwan towards the older age society and the life learning planning in the nearing future, Taiwan should have comprehensive deliberation and consideration. This research presents the education and E-learning of older persons in Taiwan by literatures review to provide the references of planning and development in the learning development of older persons.

Keywords: sporting products, lower extremity elliptical exercise pattern, exercise prescription, muscle strength and muscular endurance

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Introduction

E-learning has made feature high anywhere, especially in line with rapidly changing patterns of modern society, from the traditional teaching space, time constraints, can create an autonomous, personal learning space, therefore, the number of e-learning will be the future of the Internet era important trends and make the EFA goal of lifelong education, the opportunity to implement more specific.

In recent years, elderly person education was booming trend, a variety of educational activities has introduced the elderly, and their numbers rapidly increased substantially, society can provide more educational opportunities and learning pipeline inspire the elderly to participate in learning activities for the elderly, so that elderly person can continue to develop themselves, expand your horizons, to understand society and have to adapt to change, the ability of the times, so the elderly education in addition to well-planned curriculum, but more important is to create a good learning environment, it is not easy to make the elderly We were disturbed to learn, and the government should establish a sound system of lifelong learning elderly person to solve the problem of an aging society.

Literatures Review

1.Current Status of Taiwan elderly person education and development

1.1the elderly in an aging society, educational

With the progress of society through economic development and improve the standard of medical care, the average life expectancy continues to lengthen, so with the advent of the elderly population in the total population increase in the proportion and aging society, the elderly education in aging society It has become an important and urgent task, to distinguish the following to explore several directions.

(1)Population Structure:
According to the latest Ministry of the Interior released data show that Taiwan has about 1.49 million eight hundred and one people, the total number of population in the Republic eighty-two the end (of the total population over 65 The 7.8%) reached an aging society standards, that is, by definition of the UN World Health Organization, China has officially entered the aging of the social structure. In addition the Ministry of Education in particular will score and seven years as Lifelong Learning, published "Towards the learning society 'White Paper, to protect the people's right to learn one of the important policy of the Ministry of Education. However, in the lifelong learning system where education can be said that the old man actually relatively neglected group. Since a long time for their nursing care for the elderly part of the more important, the elderly rarely mention the issue of education. Changes in this intense modern society, in order to seek to adapt to the elderly to their own needs by the power of education to change their ideas. However, information society is the inevitable trend of globalization, when young because the information technology society and enjoy the convenience of the quality of life, the elderly, but may become the object of information excluded. Because the operation is to use the experience of information products in the past that are not elderly. But from another perspective, the diverse and varied information products and convenient transport network, not only to

expand the scope to make the elderly live, but will lead it into the broad learning space and close interaction with the community, and more enhance their self-confidence and "retreat endlessly" sense of accomplishment.

(2)Problems extend life years
With advanced technology and medicine, and gradually extend the average life expectancy, so that old age is almost filled a third of the entire life of the individual, according to the average level of Taiwan's years, sixty-year-old elderly person about fifteen years life expectancy, so education can provide elderly elderly person can continue to develop themselves, expand your horizons, to understand society and have to adapt to change, the ability of the times, through learning, helps the elderly to reaffirm the meaning and value of individual life and should be completed in late adulthood development tasks.

(3)Enhance national productivity
Executive Yuan seminar forecast that by 2024 the ratio of productive population and the retired population will be four to one, that is, four productive population burden of a retired population (Pai Hsiu-hsiung, 2004), showing that the elderly population is important for our productivity impact, and the elderly has become one must bear on social issues, thus providing elderly education through the learning process so that the elderly to learn a variety of techniques, and enhance the ability of elderly people to participate in society again, thereby lifting the elderly by productivity and importance in the community.

(4)Enhance the capacity of elderly individuals lives
For a long time, investment, and the biggest beneficiaries of education for children and youth, as if just learning the power of young people, elderly person education instead of being ignored and become a non-essential things, not only the lack of access to education and learning, and more They neglected their status. Therefore, by learning to help the elderly to reaffirm the meaning and value of individual life, and career development are of great help elderly, help the elderly should be completed in late adulthood development tasks, and enhance their career planning and old age the ability of life that the elderly will not touch with society, and can adapt to the changes in society.

1.2The purpose and function of elderly Education

Life is based on education, education is the concept of life, education can help the elderly elderly person's physical and psychological changes and understand their role play, and then to understand and adapt to social change, and is about to face the events, issues to prepare for, so "aging" is both an inevitable part of life, it is a necessary stage of life, so to be successful aging must pay attention to the elderly education. Also in H,Y,McClusky that the implementation of education for the elderly can protect and improve the situation of the elderly, contribute to the welfare of society (Pei village, 2005). DAPterson that the purpose of the elderly education in the amplification with the elderly as well as existing applications of research results in the field of education, to amplify the areas of life of the elderly, improve the quality of life of the elderly that the purpose of education in the amplification elderly elderly knowledge and skills to enhance their ability to adapt to cope with social issues(Lin Mei and, 2004), the social status of the elderly to accept the current social attitudes

and political structure conferred status or political structure. (Huang Fushun Min,2004) that the purpose of education is to promote changes in the elderly elderly in knowledge, attitudes, values and skills. Therefore, the above consolidated comments scholars can be summarized the purpose of the elderly Education:

(1)Protect and improve the elderly person's environment and expanded areas of life of elderly person.

(2)Provide opportunities for social participation of elderly person.

(3)To help elderly people self-realization.

(4)Promote Elderly change in knowledge, attitudes, values and skills and to enhance their problem -solving.

1.3Strategies and Planning of Education Elderly

To understand the characteristics of the elderly person's physical and psychological and learning needs and learning characteristics, and information on the current stage of implementation of elderly people education, so that it can make effective the strategic planning, to achieve the goal of education elderly person, and its related summarized as follows.

(1)the social: the elderly facing children grow up away from home and the death of spouses and friends, because narrow social circle and become lost and lonely.

(2)a physiologically: physiological function gradually aging, coupled with increased physical illness, may cause elderly psychological impact.

(3)economic: As the reduction in income after retirement elderly person, no financial support, so that elderly people do not feel safe on the economy.

(4)psychological: the elderly suffer "no learning" affected by stereotypes, resulting in the elderly lack of learning motivation and interest. In addition, they fear not keep up progress in learning and produce stress and anxiety and loss of self-confidence, so reduce their willingness to participate in learning.

1.4elderly person's learning features:

(1)self-esteem, low confidence in learning
Elderly who are involved in learning activities in the psychological aspect of self-esteem appear, on the other hand in the study has demonstrated a considerable lack of confidence mainly because of their ability to learn on their own skeptical; and they left a long time learning institutions when once again participate in learning activities, psychologically it will become quite afraid.

(2)study in order to complete the task for the purpose of development
Elderly person's learning, often for the purpose of fulfilling the development, so the same age, learning to learn together, to help complete the development tasks.

(3)motivation lies in the relationship between cognitive and social interests
Elderly person's motivation lies in cognitive interests and social relationships, and the general adult career-oriented motivation considerably different.

(4)The learning activities stress accuracy
Elderly response to the requirements of the learning activities correctly and safely, so the decision is often hesitate. In addition, the elderly due to the age increase, has accumulated considerable experience, when faced with stimulation, tend to have more choices, so when making decisions, often more consideration. Therefore, in the learning activities, do not have time constraints, or requirements to the pace as a result of the judgment.

(5)active participation in learning
Active participation in learning activities, is an important feature of learning elderly learning. Initiative for the elderly, learning behavior spontaneous, should stimulate their interest in learning content and passion, talent attainable ideal results.

1.5 Summary of the current educational institution elderly person:

(1)Division District: distributed emphasis on the north by the government authorities for the majority, and most of them are and do in nature.

(2)Content: In language classes, art classes, health category the top three, large classes, the teacher is part-time college degree, their own teaching materials.
(3)Class hours: Monday to Friday, half past nine in the morning the day after, four p.m. ago.

(4)education: (a) Long-term studies: In the next ten months, he taught three hours per week, when graduation certificates. (b) Short-term workshops: in 24-36 hours for a period, teaching 2-4 hours a week, does not issue certificates of business. (c) college refresher course: to help the elderly to attend the University of elective courses. (d) The college summer school: are integrated curricula.

(5)Provide educational way elderly person probably can be divided into three categories: (Lin Zhen chun, 2005)

(a)school education: the curriculum at the scheduled time to school.

(b)Community education: Community classrooms for the elderly, etc. Evergreen Academy.

(c)social education: mining various regularly or irregularly held various seminars throughout the tour, to help the elderly adapt to changes in social roles.

(d)the difficulties and needs of the elderly educational institutions: funding, space, manpower, lack of teachers and facilities.

1.6Characteristics of the implementation stage elderly Education
Implementation of this stage of education for the elderly, has the following several characteristics:

(1)Social welfare services orientation.(2)Participation in training target big difference.(3)combines multiple functions.(4)the elderly educational content and method of implementation of the design.

1.7future of Taiwan should have the elderly person education policy and planning

(1)Development of a sound education elderly and ways of implementation of the Act:
At present, China Bureau of elderly education is social welfare areas, mostly handled by the Bureau of Social Affairs and Manpower, which set up the actual implementation of advanced age or education is not strong enough and clear, it should be updated for the elderly and education legislation implementing measures to facilitate the elderly to learn, for example: by setting up community library, elderly study room, offers a free area to facilitate the mobility of the elderly. To encourage civil society to handle, set up for the elderly Education Fund ... full funding so that senior citizens take forward education more effective.

(2) providing a multi-track admissions pipeline
The Government should plan a complete education of the elderly and expand the integration of social resources to provide diversified learning pipeline elderly and take tuition benefits or free way to stimulate inspire elderly people lack motivation or lack of learning involved in learning.

(3)the adoption of a variety of courses and diverse education
Curriculum planners should be combined with multivariate life of the curriculum, and the use of a wide range of teaching methods, such as group discussion, group discussion, and individualized instruction to facilitate the elderly to participate in learning.
(4)create a good learning environment
Elderly person in the study did not show quite confident, it should provide a relatively non-threatening learning patterns, build confidence learners.

(5) Human Resources elderly Redevelopment
Elderly people should be integrated, cooperative partnership between the Government and the business community, as well as learning partnerships and seniors young two-way interaction, the use of old learning experience Passing transfer function, transfer of knowledge and skills and to expand training for elderly people and skills development .

(6)to enhance information literacy Elderly
Computer network and learning science and technology is the weapon of supplementary learning activities, seniors can thus develop more learning space, so to enhance information literacy elderly person, elderly person at home to make a variety of diverse information available anytime, anywhere.

(7)on mining in curriculum design and co-Age-old way
Based on the learning ability and level of classification classes the elderly, the elderly can be avoided for fear of facing failure, frustration and give up learning. The combined age of two generations of learning can enhance mutual understanding and promote the exchange of feelings and the sharing of knowledge and experience of both.

(8)Elderly Teachers Training
Elderly expertise in education should receive formal education and training, increasing its professionalism, improve the quality of education services.

(9)The implementation of the elderly in community education
Community education awareness allows a sense of belonging residents agree to participate in the elderly can reduce social problems, promote social harmony; the operation of community-based organizations and educational function, the construction of a learning community, to play its cooperation, independent spirit, the elderly and the community together to promote growth and development.

2. The current status and development of e-learning in Taiwan

2.1 Definition of e-learning

According to the American Association for Training and Development (American Society for Training and Development) published by the Internet magazine Learning Circuits definition of e-learning as indicated under the so-called e-learning, refers to the learner through electronic media, such as computers, video tapes, CDs, network to deliver learning content, which includes e-learning (on-line learning) and offline learning (off-line learning). The so-called online learning means by Internet (Internet) or enterprise network (Intranet) as the main transmission media to achieve education and training purposes, the equivalent of Internet-based learning (WBL, Web-based Learning). As for the so-called computer- based learning (CBL, Computer-based Learning) sucked learning content stored on CD or floppy disk, and through an independent computers to learn. And commonly known as distance learning, it is in addition to the use of electronic equipment, but also include correspondence with the Air Education and other non-face learning.

Therefore, the use of the Internet hypertext system can use image guidance tools,directories, learning and other auxiliary designed to allow learners in independent activities, learn practical knowledge. From the foregoing, the use of Internet-assisted learning has advantages, teachers can use the World Wide Web diversified materials or information to assist traditional teaching, in order to attract the interest of learners, and thus enhance the quality of teaching.

2.2 The direction of Taiwan Digital Learning target

Taiwan's Executive Yuan to 2011 years knowledge economic development programs, proposed the promotion of information technology and Internet applications, eliminate the knowledge gap, so that the people share the results of the knowledge economy, the construction of the infrastructure of the Internet applications, review of the education system strengthen IT education of the working class, to avoid structural unemployment problems of enterprise transformation. Executive Yuan announced a ninety to "promote knowledge-based economy the first year," enshrined in the country 'knowledge statehood "era begins, the full development of knowledge-intensive industries, and build a knowledge-based economy can adapt, universal access to the well-being of the new society. Ninety years of "National Economic Development Conference," also proposed to build a fiber optic network systems around the island, as well as education policy should be adjusted to increase job training opportunities

for teachers to improve the quality of domestic manpower, accelerate industrial upgrading. Policy ninety-one year, the Executive Yuan proposed laying high-speed information and communications networks, the construction of educational infrastructure and improve IT application environment, strengthening to promote IT and Internet education, promote the general IT application knowledge and ability, enrich the connotation of network learning, use of network Road resources to improve teaching model to enhance network quality of teaching, create a network learning system.

Taiwan's Executive Yuan Group NICI plan completed in ninety NICI (National Infocomm Development Programme) program, also included in the e-learning "network society of" one ring to show the importance of digital learning. 2002 to January 15 by the National Science Council of the Executive Yuan, "Digital Learning National Science and Technology Plan" concept, is expected to invest four billion yuan within five years make this inter-departmental accounting paintings. Recently developed by CEPD "Challenge 2008" six-year National Development Program, will also be included in this national-type program "Digital Taiwan Plan" in "e-life" is the focus of the first plan. The program invite representatives of the parties, brainstorming, and finally integrate into seven sub-item.

Consideration has three main axis (1)to enhance the country's overall competitiveness in the knowledge economy era planning. (2)promote the development of e-learning related industries. The new wave of academic research (3)promote. On the idea to improve the country's overall competitiveness era of knowledge economy as a starting point, starting with promote the national digital learning, and begin to reduce the digital divide, so there are two sub-plans, were (1)national e-learning and(2) "reduce the digital divide."(3)"action learning aids carrier and multi-function e-book package," so that students can at any time, any place to be and the Internet world, again by "universal e-learning", "reduce the digital divide." and "action learning aids carrier and multi-function e-book package" and industrial "digital learning network of science parks" established to boost e-learning related industries. Based on the above, the present plan is divided into seven sub-items, namely "universal e-learning", "reduce the digital divide", "action learning aids carrier and multi-function e-book package", "e-learning network science park "," forward-looking e-learning technology research and development ',' digital learning and cognitive learning basic research 'as well as policy guidance and personnel training. "

Entire e-learning program has three main objectives in the planning ponder spindle: (1) to enhance the country's overall competitiveness in the knowledge economy era;(2) to drive e-learning related industries; and(3)to promote a new wave of academic research, the specific the following objectives:

a.you can learn anytime, anywhere to create a diversified digital learning environment.

b.enhance national digital literacy thus enhance the country's overall competitiveness.

c.fully stimulate the market demand to expand the e-learning industry economies of scale.

d.policy guidance and create a favorable environment for the development of e-learning industry.

e.push Taiwan into the global Chinese community e-learning hardware and software research and development center.

f.to lead Taiwan into a global e-learning related to science and technology research center.

This project is a clear statement of goals, and then on the social aspects of the industrial side, the academic side briefly described as follows:

(a)social aspects: the knowledge society inside each person, group all knowledge providers, but also learners, how these knowledge providers and learners into the inside of a large infrastructure, we create a common, so that our diverse knowledge flourishing to accelerate the advent of the knowledge society is worth thinking about the subject. Type program plans to build the country can learn anytime, anywhere diversified digital learning environment, and by promoting universal e-learning, e-learning activities to enhance the people. Vision can be divided into the overall domestic environment and community environment two perspectives: the environment overall domestic, including the creation of the job market, to enhance the e-learning industry, promote digital services, the establishment of convenient digital pipeline; in the community environment, including reducing community digits gap, implement community networking, integration of community resources to promote community-based e. Enhance universal digital literacy, and thus enhance the country's overall competitiveness.

(b)industry faces: domestic e-learning market demand is still too small, the kinetic energy is also inadequate funding. If there is an integration platform can provide user accounts, community discussion, pay mechanism, which provides e-learning for the company's services will be of great help. In this project, the by promoting "universal e-learning", "reduce the digital divide" can effectively stimulate overall market demand and expand e-learning industry economies of scale. Furthermore, by means of policy guidance to promote "action learning aids — carrier and multi-function e-book package", "e-learning network of science parks' plan to build a sub-integration platform that can create a favorable environment for the development of e-learning industry. In terms of the industrial side, this type of program countries will play a guiding upgrade domestic industry to stimulate healthy competition in the relevant industries, as related industries to promote and bred, and Taiwan into the global Chinese community to promote e-learning software and hardware R & D center.

(c)academic side: National type a new plan will provide universal and more convenient learning environment to enhance the quality and popularity of e-education. In academic research, to stimulate a new momentum and build a new infrastructure for early learning to drive a new generation of scientific and technological research, and effective integration of domestic research team valuable research and resources to lead Taiwan into a global e-learning related to science and technology Research center.

Currently the Ministry of Planning or in the relevant plans and digital learning will be closely related to the devaluation of the Ministry of Education, the Ministry of Education in recent years spared no effort in promoting the digital work related to the study, there are currently planned "Network Learning and Development Plan" and "IT education infrastructure plan." The former is designed to create the perfect learning environment network, network mode by general formal education development gradually extended to reflux education and lifelong learning for all models can also be help guide the educational function of the tools and technology can strengthen national knowledge and experience accumulated acquisition and learning abilities, and thus the value of sophistication and knowledge innovation, and enhance the growth of each individual drive up the entire community and national competitiveness. However, "Infrastructure Information Education Plan" is there a part designed to reduce the digital divide. Second, to promote economic development committee's "knowledge economy development programs specific implementation plan", which contains important vision and make the best use of human resources, business and non-governmental organizations, to promote education and vocational training led to "universal learning", "National Innovation" the atmosphere, increase the added value of each person working to create a high national income. In the Ministry of the Interior, there are "pushing plans to reduce the knowledge gap", the planning vision is: Implementing accessibility information environment in order to reduce the gap between physical and mental disabilities in low-income households of knowledge; handle promote outreach activities, so that young people in the use of information network way to quickly learn knowledge, but also can fully understand how to choose the correct network information, thereby protecting themselves; to promote the widespread use of computer and information disadvantaged groups, and conduct information education and training, in order to reduce the knowledge gap, to shorten the gap between urban and rural areas.

Conclusion

In recent years, the elderly education was booming trend, a variety of educational activities has introduced the elderly, and their numbers rapidly increased substantially, society can provide more educational opportunities and learning pipeline inspire elderly people to participate in learning activities for the elderly, so that elderly person can continue to develop themselves, expand your horizons, to understand the community and the ability to adapt social change, it is elderly education in addition to well-planned curriculum, but more important is to create a good learning environment, it is not easy to make the elderly person's learning by interference, and the government should establish a sound system of lifelong learning elderly, dedicate more resources and effort on the elderly person education, hoping to solve the problem of elderly learning.

In general elderly person in sports, perception, and cognitive function in three elderly person in the use of various functions of information products, perceived as its primary function key, so in consideration of the needs of elderly people use design, it should first focus on ability of elderly people in perception. Also in demand on the use of discovery, elderly voice control is considered an ideal mode of operation, so if effectively use information products for the elderly is quite beneficial, through the use of technology, can effectively promote the elderly person and society closer active links, so that the elderly will not be lonely, and enhance the life of production, communication and self-care skills.

New look twenty-first century society will be highly urban society, highly information society, the entire education system is under attack and challenge, individuals should continue to lifelong learning, and the community must establish a learning society, can only cope a high degree of information, a rapid increase in knowledge and change, although Taiwan has entered the era of an aging society, the elderly person's education has become mainstream adult education, and learning the right of the elderly at the "Lifelong Learning" more should be everyone's attention. So the elderly person's learning problems, be sure to plan ahead, prepared to enter the field of education for the elderly; on the other hand for the educational needs of the elderly urgency, it must respond, thereby increasing the motivation of elderly people to learn and achieve "no Age, everyone shared social ", and how teaching through a new way to help elderly people to learn is a priority in the coming twenty-first century elderly learning. As a result, its potential can only make personal, social, national play, enhance the quality of life, promote social harmony, so that our seniors active participation of all the people to work together in the global village of the century into the future, so that the elderly education in Taiwan Vision full of ideals and hope.

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