The Internet: The Emergence of New VET Paradigm in Developing Countries

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Abstract

Education is microcosm of a society. Like general education, vocational education and training (VET) also represents the culture of the society. In many developing countries, this representation is commonly featured with a bureaucratic model engineered by the authority (i.e., government, administrator, and planners). This model is characterized with a singular definition of VET practice, including what and how to teach. Learners are not prepared with the cognitive knowledge and information that empowers thinking and skill to meet the workforce demand, but they are viewed as the recipients to be treated with what has been predestined. In such a situation, VET can be manipulated to function as an authoritative channel rather than an ideal education and training demanded by the workplace and global market. This paper discusses how the increase uses of the Internet in VET institutions of many developing countries builds a new paradigm that significantly changes the traditional VET not to a destination intended by the authority but to that of the Internet culture. This paradigm stimulates VET experts, practitioners, and learners to view VET from different perspectives and to posses a capital of learning empowerment. In this regard, the traditional paradigm, which reflects authoritative VET, changes to a paradigm that promotes lifelong learning. The Internet makes this change possible by providing great amounts of information as the flexible seed of learning. The new paradigm--the learning-based-- becomes typical in VET of developing countries since it can take place flexibly beyond the authoritatively designed environment.

Keywords: Internet, VET paradigm, developing countries, authority, teaching-based, learning-based, global market, workplace, and empowerment.
Introduction

This paper discusses how the Internet promotes the emergence of new Vocational Education and Training (VET) paradigm in developing countries. To clarify its concepts, the author first defines a number of key terms used to represent certain meanings. The Internet is a network of networks that includes the World Wide Web (WWW), listservs, newsgroups, and discussion forums on various topics along with electronic mail (e-mail) and electronic journals (Wagner, 1995; Wagner, 1997). The term "paradigm," which was introduced by Kuhn in 1962, originally refers to "a set of scientific and metaphysical beliefs that make up a theoretical framework within which scientific theories can be tested, evaluated, and if necessary, revised" (Audi, 1996). However, this definition seems too imprecise, and therefore it does not reflect the context and dynamic nature of a subject matter. To reflect this nature, a number of authors propose a flexible definition. Blackburn (1994) suggests that "a paradigm does not impose a rigid or mechanical approach, but can be taken more or less creatively and flexibly" (p.276). Mealyea (1990) defines a paradigm as a set of beliefs and existing traditions of practice among enduring groups of adherents. Angeles (1992) views it as "a way of looking at something" (p.218). These definitions can be used in viewing the dynamic VET phenomenon in developing countries. The term "developing" means the "undergoing development, growing, evolving" (Flexner, 1993, p.543). These countries are in the process to identify the patterns of their growth in many sectors, including education (i.e., VET). Thus, developing countries are those in between, neither developed nor underdeveloped in economy and other sectors. Contemporarily, many of these countries have been introduced with the Internet, but still not aware (or do not focus) on impacts of this technology on VET.
This paper focuses on roles of the Internet in building a new VET paradigm and how this emerging paradigm challenges the traditional paradigm especially in meeting the new VET demand in developing countries. Under this new paradigm, the author will argue why learning cannot be viewed not only what takes place in the formal classroom but also what takes place anytime in non-formal and informal contexts at work and in the community. The Internet contributes to the emergence of new paradigm by providing paths and links for VET experts, practitioners, and learners in developing countries to view VET from different perspectives. This will also relate to how the new paradigm challenges the authoritative VET with the support of the Internet to the information literacy.

This paper is organized into the following sub-topics. Following this introduction, it will focus on the traditional VET paradigm in developing countries. Then, the author will elaborate how the use of Internet establishes a new VET paradigm. Next, the analysis will be on the nature of new VET paradigm before disclosing it with some conclusions.

**Challenges to Traditional VET Paradigm**

VET in many developing countries has for years been conducted under a paradigm of the authority (i.e., government, administrators, and policy makers) to accomplish its practical purposes in meeting the needs of workforce. Schroter (1995) suggests this traditional VET as a bureaucratic model that is institution-based in nature. With this model, VET can be engineered to function as an instrument of the authority to accomplish its goals. Consequently, VET is not free to absorb information from different countries. VET educators have to implement the design of the bureaucracy, especially through the department of education, administered among others in VET curriculum. The curriculum is designed to specify not only the VET general goals but also the books, teaching aids, and teaching methods to use without giving autonomy to VET practitioners, especially teachers. In such a climate, learners who suppose to know when and how
to learn a skill are not given chance (or do not engage) to empower themselves by using and developing their own learning strategies. VET program is “linearized” from the top bureaucracy to the classroom.

VET learners are traditionally taught to perform pre-defined jobs with specific skills as guided by the department of education (Merickel & Daud, 1998). This is all conducted without building a climate for learners to promote their cognitive knowledge such as problem solving, creativity, and communication skills that enable them to respond to unexpected challenges of workplace. There is no flexibility for learners (i.e., when and where) to learn for a better achievement, since the traditional skill-specific education and training is set up in a rigid order. This skill-specific training maintains the VET tradition that prepares learners to cope with the skills for labor needs (Naylor, 1997) rather than to train learners to cope with future unexpected challenges in order to meet the rapid changing demand of the society. The challenge of contemporary workplaces is that the specific skill received in a school will soon be outdated (Cornford & Peak, 1997). As a consequence, vocational school and training center produces graduates who are unable to compete with the rapid in workplaces. These graduates do not have ability to creatively adjust their VET with the changing needs because they are not prepared with cognitive knowledge that enables them to function in that way.

The traditional paradigm that perceives graduation from a vocational school or training center as the end of learning is challenged with different perspectives due to the increase use of the Internet. The view that learning is only what takes place in a school or training center is challenged with the paradigm of lifelong learning (Rakes, 1996). The school-based learning that assumes training or education for lifelong workplace is no longer appropriate vocational school or training center graduates are not able to keep up with the rapid change of the society. The change of workplace appears to be faster than that of the vocational school and training center. There has been a trend in different parts of the world that workers do not keep doing the same jobs for their
entire life. The nature of modern work requires them not to routinely function as an extension of a machine or to perform a specific skill in a repetitive manner. The change in technology and global market impacts the nature of work and workplace.

Since VET in developing countries is traditionally institution or school-based (Schroter, 1995), its activities are mostly what take place only in classroom, workshop, or laboratory. Under this paradigm, not only does teaching dominate the activities of the school or training center but also reduces vocational education and/or learning to what formally takes place in school or training center. This reduction conditioned a VET institution like a factory designed to produce workers based on the assumption made before an education and training occurs. This tradition neglects the role of non-formal and informal education and/or learning regardless of how fundamental it is. Even though VET planners and educators intend to promote lifelong learning, many vocational schools and training centers in developing countries do not have sufficient aids to support the learning infrastructure (Schroter, 1995). This reality can be observed in the planning and implementation of a VET program. Learners are judged merely from teachers', not the learners' perspectives. Although some planners and teachers agree with the value of lifelong learning, the promotion of learning is often conducted based on what works from the administrative and authoritative teaching perspective. Since this perspective plays a dominant role, the administrator and (sometimes) teacher decide anything for VET "learning" to take place, while learners are not empowered to develop their own learning and learning strategies. Since learners are perceived as the passive recipients, no active and creative vocational learning are stimulated to take place. In short, the so-called lifelong learning, although it had long been accepted in many developing countries, is not applied in reality. This feature is common in the operation of VET in developing countries because education and/or training in these countries often take place in artificial world of work and lack of demand orientation (Schroter, 1995).

The traditional VET paradigm cannot empower learners to learn partly due to its lack of
sources and variations of new information available. Only teachers, some textbooks, and a few other materials are sources of information. There is no means of information and communication that enables VET to empower their cognitive and problem solving ability (Merickel & Daud, 1998). The inability to empower the learning capacity of VET learners results their poor cognitive knowledge and skills needed in the changing workplace. Thus, the implementation of VET lifelong learning has been so limited because of lack of appropriate infrastructure that can make it possible. Fortunately, the Internet has shown as an appropriate means to empower learners by networking to VET planners and practitioners all over the planet. The transfer of VET information through the Internet in the past few years gained a mutual advantage not only between VET planners, practitioners, and learners of developed and developing countries but also among those of developing countries.

The use of the Internet in VET has been a new agent of change not only to shift its traditional but also to build a new VET paradigm in many developing countries. The traditional paradigm may have not changed without the advent and use of the Internet in various VET programs. Hence, the role of the Internet in developing countries has been a significant factor not only in changing the nature of work but also in establishing the new VET paradigm. Cornford and Peak (1997) point out that technology, especially those related to computerization and automation, results in significant changes to the nature of work, knowledge, and skill. Although Conford and Peak reflect the Australian context, their report currently appears to be true for developing countries as well. How the change and development of a technology (i.e., the Internet) influences the nature of workplace in developing countries or developing economies requires a VET proper response (Mndebele, 1997).

The role of the Internet apparently reflects the trend of global market and workplace that require us to perform in different way we used to. An employee must compete with others both at home and away from home, continues to develop new skills to succeed in workplace, be abreast
of a global trend that influences the success of business attempts, and must utilize skills to integrate business strategies from various environments (Mndebele, 1997). This global trend suits the skills identified in the report by the Secretary's Commission on Achieving Necessary Skills (SCANS, 1991) "What Work Requires of Schools" by the US Department of Labor. The global trend, as reflected in SCANS, does not adopt single-skill training since this can easily be outdated in line with the development of technology and the increase demand of the society. Therefore, it is necessary to include knowledge and use of resources, interpersonal skills, acquiring information, systems (i.e., understanding complex interrelationship), and working with a variety of technologies into workplace competency. SCANS recommends a three-part learning skill foundation. This includes basic skills (i.e., communication and understanding in reading, writing, and speaking), thinking skills (i.e., problem solving, knowing how to learn, the generation of new ideas, setting goals, and choosing best alternatives), and personal qualities (i.e., responsibility, self-esteem, sociability, self-management, integrity, and honesty) (p.xviii). SCANS' recommendations suit the concept of information literacy. Mike (1996) suggests that on the Internet learners can do more than simply consume content—they also generate content” (p.7). This kind of interactive network is necessary to empower their knowledge of global workforce in developing countries. The interactive information literacy offered by the Internet is necessary to empower their knowledge of global workforce. This means the Internet supports the global trend of workforce that not only in promoting VET in developing countries but also in strengthening the links between the VET individuals of developed and those of developing countries. Kraska and Duman (1997) point out that learning more from other nations help VET individuals better understand their own needs. Learning through the Internet contributes to the emergence of new VET paradigm.

The Emergence of New VET Paradigm
The traditional dominance or reliance on lecture as the main feature of classroom instruction has been under attack (Cove and Love, 1996). VET researchers are aware of the need of a new VET paradigm (Frantz, 1994; Heidegger, 1998). Yet, the traditional practice in VET of many developing countries had not begun to change until the advent and use of the Internet. The Internet introduces the traditional VET with different perspectives and alternatives. New research findings and developments from developed countries inseminated through the Internet enrich the VET practices in developing countries. The increase information and communication in education has made the availability of tremendous VET data. This all impacts how VET is viewed in these countries. For Kuhn, this phenomenon leads to "a paradigm shift," that is a shift in professional commitment from an established to a new paradigm (cited in Mealyea, 1990). This shift deals with change from the paradigm from the traditional (i.e., VET materials are limited to textbooks, teachers, and some other limited sources) to the new paradigm (i.e., VET is enriched with multiple sources of materials, information, and knowledge accessible from the Internet).

In achieving rich sources of information, VET Internetters, especially learners, need to know how to access information competently, how to evaluate information as to accuracy and pertinence for each need, and how to use this information to communicate effectively. These skills are necessary for VET learners to utilize the information explosion as the seed of unprecedented multiplication of knowledge. The information that promotes literate interaction and communication is not only useful for general education but also for vocational and technical education as well as for the training of various skills demanded in the future workplaces. Worries on the enormous quantity of information are misleading because not all information is stored in human heads, but in computers (Perjes, 1999). The availability of great amounts of VET information develops a paradigm that sees VET not only what take place at schools or training centers, but also those at homes and workplaces. This flexibility of time and places thus creates a culture that recognizes the value of individual informal learning. It values learner as an important
dimension (Thomson, 1973). Thus, VET learners who are able to adopt this new development will have lifelong skills needed in learning and relearning the skills needed throughout their working lives.

The introduction of the Internet in developing countries has awakened VET educators and administrators to reform their VET. This awareness has drastically placed information literacy as an integrated discourse in VET curriculum. To some extent, this tendency follows VET of developed countries. The ability to access, evaluate, and use information from a variety of sources is central to all successful learning and by extension to all successful learners (Merickel & Daud, 1998). In line with this awareness, new VET paradigm is emerging to respond to the traditional paradigm. The Internet supports the emergence of new VET paradigm by offering both new ideas and different practices (i.e., VET project, research, and international cooperation). This inspires VET educators and administrators in developing countries to re-examine their traditional paradigm in looking at VET as a single skill education and training.

The rapid changing demand of workplace indicates that the skills taught a vocational school or training center become quickly outdated. Therefore, modern workforce requires not-only well-qualified individuals who have the competence to perform the entry requirements immediately and successfully but also those who are adaptable to continuous technological and workplace changes through further education and training (Frantz, 1994). The Internet plays a significant role in fastening this process of obsolete. The new skills taught today becomes old tomorrow. The new working culture challenges the traditional work culture that sees job as a permanent career. Like those in developed countries, workers in developing countries are now facing a situation that encourages them to keep learning not only what occurs at school or training center but also what is experienced at workplace. This experience is currently influenced by the global trend that is mostly brought by the Internet. This demands a knowledge with which vocational school or training center graduates empower themselves to adjust with new demands.
Therefore, good cognitive knowledge, new skills, new forms of learning, and provision of opportunities are necessary to learn lifelong (Hollanders, 1997; SCANS 2000). It is in the process of providing these demands and in forming a new perspective to the existing VET that the Internet is essential. This new way of looking at VET is called a new paradigm, a different way of looking at VET. This new paradigm changes the traditional practices of VET researchers, educators, and learners to break through various traditional barriers and to enable them to see VET not as the end of education and training. They can surpass the traditional barriers when they are more interested in networking varied sources of information, knowledge, VET experts, practitioners, and/or learners around the planet. The more intense they are involved in this network, the more they establish the new paradigm. The Internet functions as a tool that leads VET researchers, educators, and learners to achieve their end goals by bringing them to build a paradigm that fits the nature of lifelong learning.

The emergence of new VET paradigm makes the traditional VET that under-utilizes information as essential VET resources is challenged to function otherwise. The information offered widely by the Internet expands VET resources to network with potential experts from different parts of the world, and potentially to identify VET financial resources from different sources. This challenges the adherents of traditional VET paradigm to value information. In fact, the Internet is a useful tool in creating a resource-based learning environment (Rakes, 1996). Perjes (1999) believes that this new development already possess considerable independence from curricula-institutional education. The network provided by the Internet enables VET researchers, practitioners, and learners to exchange views with colleagues all over the world. This makes the traditional VET paradigm that bases on teaching and learning at a formal school and training center superfluous. Over the past few years, the world has witnessed a phenomenal growth in communication technology, computer network and computer technology that all have a profound impact not only on flexible delivery approaches to technical and vocational education (Majumdar
& Das, 1997. This development also changes of the nature and process of learning environment. The availability of great amounts of information as the seed of learning promotes a shift to the traditional emphasis on role of the instructor both as the subject matter expert and as the primary deliver of instruction. This leads VET practices, particularly those in developing countries, to be more learner-centered—to depend on a contextual learning process. Imel (1999) suggests that the use of the Internet has supported learners to collaborate differently with people from different parts of the world. In turn, this enables them to take more active role in learning process, to use more variations of learning styles, to access a wider range of resources, and to engage in collaborative learning through increased interaction with others. Since the nature of the Internet provides access to information and knowledge outside of the classroom, VET teacher no longer plays the traditional role a subject matter expert or to perform instruction in highly directive styles and/or to build such hierarchical relation as they used to. The teacher's role is also played by parents or overall community since they already have access to varied educational resources (Perjes, 1999). Nevertheless, this does not mean teacher does not have function anymore, since he or she can, and need to, better function as a good facilitator of learning as well as a planner, guide, and mentor (Imel, 1999). This new phenomenon also brings a freedom to VET learning by moving away from low cognitive tasks to high order thinking skills. With the aid of the Internet, VET grows as a key to empower a higher order of cognition and skill that potentially develops synthesis and integration skills. This takes place by representing a variety of perspectives offered by the Internet, so that VET researchers, educators, and learners can interpret what they mean for their contexts of learning and/or implement the perspectives in their workplaces.

The Nature of New VET Paradigm

The nature of new VET paradigm is different from that of the traditional in the way how it
views learners as those who can establish a lifelong learning not only in a classroom, laboratory, school or training center, but also at work and the society. To provide them with the best chance of being successful learners and future employees, they need to become information literate as promoted by the Internet (Rakes, 1996). It views learning to take place flexibly (i.e., anytime and everywhere) to meet the learners' need, mode, and interest. Thus, the new paradigm relatively frees each VET individual from the authoritative elements of a system by giving the freedom of choice to learn and develop individual creativity. The Internet creates an opportunity in which learning can be functioned as a personal and individual experience (Foel & Fritz, 1998). With this opportunity, a lifelong learning can be promoted to take place free from the traditional barriers such as time and place.

The new paradigm allows learners to cope with live skills such as critical thinking, communication, mathematical, and technical skills. Traditionally, these skills are neglected in many vocational schools of developing countries although they can be tapped and expanded to what is new and problematic as a worker faces in workplace. With the flexibility to tap and expand these skills, the traditional authoritative guidelines of the government system can be minimized. The future workplace demands can be accommodated if VET can be dependent on the market needs, not the authority. With the existence of the Internet, learners can emancipate themselves from the government's hierarchical and authoritative indoctrination that has rooted in VET of developing countries for many years.

The Internet’s flexibility to access and learn new information from different sources allows VET individuals to build a culture of lifelong learning (Rakes, 1996). Candy (cited in Cornford & Peak, 1997) identifies the characteristics of this lifelong learning. They include **an inquiring mind**: a love of learning; a sense of curiosity and question asking; a critical spirit; and comprehension-monitoring and self-evaluation, **a helicopter vision**: a sense of interconnectedness of fields; an awareness and understanding of at least one field of study; and breath of vision,
**information literacy**: ability to locate, evaluate, manage, and use information in a range of contexts; ability to retrieve information using a variety of media; ability to decode information in a variety of forms; and critical evaluation of information, **a sense of personal urgency**: a positive self-concept of oneself as capable and autonomous; and self-organization skills such as time management and goal setting, **a repertoire of learning skills**: knowledge of one's strengths, weaknesses and preferred learning style; a range of strategies for learning in whatever context one finds oneself; and an understanding of differences between surface and deep level learning? (p.22). These five characteristics specifically accord the nature of the Internet that supports and helps implement the life-long learning characteristics in VET.

The Internet contributes to an inquiring mind in the way it creates an ecosystem of subcultures (Wagner, 1997) that allows VET learners to love learning. Since there are always new things to be accessed in different modes (i.e., texts, pictures, sounds, newsgroups, and even teleconferencing), it is obvious that the Internet makes up a vast array of information, knowledge, and experience that motivate learners to promote a sense of curiosity and question asking. The availability of new materials and information in a dynamic way makes the Internet significantly different from the traditional technologies. Windschitl (1998) points out that its pervasiveness and dynamism explains how the Internet is not only a channel of information but also a shaper of experiences. It shapes not only the nature of teaching and learning but also a paradigm that places teaching and learning as a dynamic process. Thus, the Internet provides a new learning culture in which learners are challenged to be curious to learn new materials. These new materials are different from the traditional printing materials that only reflect a static VET existence. They are also different from movies, videos, or televisions since they give freedom to learners as well as teachers to select or disseminate the materials of their interest in the way they like. Learners and teachers can do this almost without limit since there are always new sources of interactive VET materials and/or information. The fact is that the greatest strength of the Internet is its ability to
support simultaneous, interactive information, and communication among VET individuals to access or communicate to those of developed and other developing countries. This new ecosystem supports a critical spirit of learning culture that is highly important from the viewpoint of new VET paradigm.

In relation to a helicopter vision, the Internet plays a significant tool in featuring connection and accessibility to information as defining traits (Windschitl, 1998). The provision of links to various sources of VET information make learners view VET based on a broad perspective and unlimited experience. If there is a VET concept or project that does not work in one context or institution, learners, teachers, and researchers can learn from those workable and available in different links. This feature allows learners to understand and question how a VET paradigm that is developed based on a narrow experience in a context or institution. The critical and visionary analysis of a VET concept or project, for example, cannot take place without having a sufficient input. Traditionally, this has been the case in many developing countries, but the Internet provides more and more input to empower the critical and visionary analysis of the VET concept or project in these countries. The more VET Internetters access different links the more they find the interconnectedness of one issue to another. This interconnectedness is not only the abstract but also the practical. The nature of this interconnectedness suits Perelman (1992) who refers this network to "an unprecedented degree of interconnectedness of knowledge, experience, media, and brains--both human and non-human" (P.23). VET individuals can thus develop a vision of what they do and mean for the VET development conceptually and practically. The nature of this paradigm does not neglect the importance of vision in looking at education or training as a process. It places vision as an important aspect of the whole VET program to anticipate any potential change in the nature of work due to the increase demand and technology development.

The information literacy, as the capital of lifelong learning, has been of significant support
from the Internet. Traditionally, VET learners need to manually store and sort the information they gather from different sources. Today, the Internet helps free them to sort the materials in traditional way so that they can move from low-level tasks to concentrate on higher-order tasks (Windschitl, 1998). As the Internet functions as a conduit for VET researchers, teachers, and learners, they are challenged to empower themselves not to handle routine jobs but to understand what they do in order to enable them to integrate their lifelong learning from school, training, and work experiences. This addresses the issue if there is a need for distinction between academic education and vocational education since vocational work or skill can only be understood with the underpinning of academic understanding (Parkin, 1998). Wu (1998) also suggests that general skills and abilities, proficiency in skill specialization, creativity, and analytical ability need to be incorporated into VET program. The process of incorporating these cognitive skills and specific skills by the creation of common framework (Lasonen & Young, 1998) can be help improved by the Internet since it provides inputs from practical through theoretical VET from different contexts.

The Internet's contribution to the personal urgency can be seen in the VET Internetters' autonomy and flexibility in accessing the needed materials and information. To access these materials, they are no longer limited in time and place. They can access the learning materials and information to meet their learning goals and interest flexibly. This can be made happen because the Internet provides rich volumes of information that can be manipulated to construct a significant body of knowledge in order to help solve any problems hampered VET learners. This helps them not only pose appropriate questions on their field of interest but also find out answers to these questions.

Regarding the repertoire of learning skills, the Internet empowers VET learners to examine different learning styles that have been applied in different parts of the world. The links that provide information on different learning styles enrich the VET learners’ ability to develop
their learning skills. The complex variety of the Internet's sources of information provides array of choices for learners to surf the websites that meet their level of mastery and styles of presentation. Learners can identify the level of abstraction or concretion of the VET materials by referring to the vocabulary used that represent the types of the materials. The Internet helps this process because it covers a great array of information not only on the specific accessed materials but also on other related works of the same author or different author(s). This is significantly different from the traditional sources of information that cannot offer this richness and flexibility simultaneously.

The above explanations show how the emergence of new VET paradigm by Internet promotes an "ideal" VET lifelong learning. Not only does the Internet allows learning to take place in vocational schools or training centers but also in family, community, and everywhere by offering continuous learning activities. Perelman (1992) points out that this phenomenon ends the traditional school since "learning is everything, everywhere" (p.52). This means that the traditional paradigm that views VET as the terminal process of education is no longer accurate with the explosion availability of information. It reinstates the fundamental meaning of education which is not only what takes place in a school or training center but also what takes place informally in family, community, and work everywhere. This supports a theory on role of the Internet in changing the nature of learning (Kinzie, Larsen, Burch, and Boker, 1996). The meaning of VET that used to be reduced to what takes place in schools or training centers is re-identified with the advent of the Internet to promise a new VET era in developing countries.

Conclusion

This paper has elaborated how the Internet with rich amounts of information and communication builds a new VET paradigm in developing countries. The process of building this paradigm has been to respond to the traditional VET practices in many developing countries that was mainly regarded as a terminal education. Traditionally, VET is planned in accordance with
what is accepted by the authority. Consequently, vocational school or training center only offers the skills of the past that may not be appropriate for the future workforce. The traditional paradigm sees teaching as the dominant feature of many VET classes, and it does not view learning as an important aspect.

It has been for years that VET experts and educators propose the need of lifelong learning, but this has not been possible since no such a learning climate can be created without the advent and use of the Internet. The shift in paradigm takes place because the Internet impacts the traditional VET bureaucratic practice and patriarchal culture. The Internet promotes new VET learning environments that significantly challenge the authoritative VET practices. Thus, the Internet proves to be a tool that creates an ecosystem of VET learning culture needed in rapid changing. Since the traditional paradigm is insufficient to fulfil the challenging VET needs, a new paradigm emerges to build lifelong learning as the core of VET business. It places learning beyond the traditional border, without being limited in time and place like school, training center, but also in family, workplace, and the community.

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