Extension Education as a Practice of Youth Development: A Conceptual Review

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Abstract

To come up with novel ideas and adjust to the Fourth Industrial Revolution, the younger generation, referred to as youth, needs to be well-versed in technological domains and possess strong fundamental abilities. According to this conversation, a university-level education system is successful when each student can reinforce generic abilities and adapt and apply the knowledge they learn in their subjects to the job and other facets of their lives. However, from the standpoint of developing youth education, youth in higher education are still only somewhat prepared for extra activities to improve their knowledge, competencies, and abilities, which contributes to the lack of productivity of recent graduates. Lack of practice and chances on real platforms to apply or build self-capabilities in real-life situations is one of the key causes of the limited development of youth generic skills. The focus on developing individual skills must be in line with the topic of how youth might build generic abilities. This includes taking into account parts of learning skills that can be used for lifelong living. To enhance human resource development, it is crucial to consider the Extension strategy, which emphasizes the expansion of knowledge, skills, and competencies that are essential for improving performance inside a business. Hence, the purpose of this concept paper is to examine how Extension Education serves as a foundation for the long-term viability of postgraduate programs, providing avenues for youth to attain their objectives while also fostering well-rounded skill enhancement.

Keywords: Youth, Youth Development, Generic Skill, Extension Education

Introduction

Malaysia's youth comprise forty percent (40%) of the country's population and are tasked with acting as an economic stimulant (Tey, Lai & Ismail, 2019). The current generation must possess robust fundamental skills and extensive technical knowledge in order to develop innovative solutions and effectively adapt to the Fourth Industrial Revolution (Ngah et al., 2020). Success in a university education system is attained when graduates are able to effectively utilize the knowledge gained in their field of study in both professional and

personal contexts, by strengthening their generic skills (Groen et al., 2020). In order to increase graduates' management and flexibility, Singh (2015) claims that generic skills can help them create a new set of abilities that will help them succeed in a range of environmental conditions. Generic skills refer to a combination of information, skills, motivation, and attitudes that are necessary for carrying out a specific responsibility or intellectual task in a professional setting. These skills are suitable for professional performance within a particular environment (Liu,. et al., 2020; Munangatire and McInerney, 2021).

Malaysia is one of the countries that have prioritized the enhancement of generic skills as a strategy to equip the younger generation for the Fourth Industrial Revolution (Kaliappan and Hamid, 2022). The Malaysia Education Development Plan 2015–2025 (Higher Education Institutions) highlights the need to generate young graduates who are capable of facing challenges in the social and economic spheres and who value the quality of self-development, also referred to as generic development. These graduates must also excel in academic fields. Despite Malaysia's efforts to offer diverse Development Modules aimed at cultivating highly trained and competent individuals by global demands, the overall potential of higher education youngsters remains at a moderate level (Daud, 2017; Fajaryati et al., 2020).

Nevertheless, when considering the advancement of youth education, the preparedness of higher education students to engage in supplementary endeavors aimed at improving their knowledge, abilities, and proficiencies remains moderately satisfactory (Salleh, 2016; Gruzdev et al., 2018; Okolie et al., 2019; Tang, 2019). This partially explains why young graduates may lack productivity (Fajaryati et al., 2020). Tsaoussi (2020) attributes the limited progress in generic juvenile skills to a dearth of practical experience and the opportunity to apply and enhance self-capabilities in real-world scenarios. The effectiveness of the established generic skill models is also called into question because, from the standpoint of the literature on generic skill reinforcement, there is a dearth of discussion on how the practical application of generic skills takes into account the experiences and situations of students during the learning process (Ploum et al., 2018). To fully appreciate and analyze overall progress, it is crucial to consider the viewpoints of students who are experiencing the learning process, particularly in various educational settings (Lambrechts et al., 2018).

To accomplish this, Dhawan (2020) contends that the formal education system—which combines detached learning and self-directed learning—is a useful tool that supports students, particularly young people, development of general skills and knowledge of the importance of lifelong learning. The concept of lifelong learning can be emphasized at all levels of education by shifting the perception of the learning process from a static one to a focus on individual-based or learner-centered learning. This emphasis is particularly highlighted in postgraduate-level education. The shift in the educational setting towards the new standard has brought about a recognition of the significance of guaranteeing uninterrupted learning for adults (James, & Thériault, 2020). According to Lopes and McKay (2020), education has a crucial role in helping adults enhance their life skills and ability to adapt to a more demanding living environment.

The International Labor Office places a high importance on lifelong learning and the development of self-improvement skills in its Strategic Plan for the years 2022-2025, in response to the COVID-19 pandemic (Bridgford, 2020). Andersen (2012) and Nghia (2017)

contend that this is important for achieving future success. Universities are ideal for lifelong learning because of comprehensive Extension Education programs, which investigate the entire developmental process (Jackson & Michelson, 2016). According to Sichula (2016), Extension Education helps postgraduate students acquire skills and achieve their goals. It recognizes postgraduate students' diverse strengths and skills and fosters the holistic development of numerous capabilities. This approach enhances knowledge, skills, and competencies to enhance organizational performance (Gilley et al., 2002; Ngambi & Chakanika, 2020). Educational possibilities support this strategy, helping communities make important decisions to develop themselves and their communities (Ngambi & Chakanika, 2020).

The Concept of Extension Education.
The words "expansion" and "extension" are derived from Latin words like "tension," which means "expansion," and "ex," which means "exit" or "outward movement" (Leagans, 1961). According to Singh et al. (2018), "development" can therefore be characterized as a learning process that skilfully combines ideas from social science with findings from the physical and biological sciences. This combination seeks to influence people's thoughts, skills, attitudes, and behaviours in formal educational environments as well as other spheres of their daily life. This concept of Extension Education can be explained as Table 1 below:

Table 1
Concept of Extension Education

Source	Concept
Kelsey & Hearne (1963)	Extension Education is an education system outside of schools where adults and youth learn something through action (learn by doing).
Leagans (1961)	Extension Education is an application of applied science in the context of research, field experience, and relevant principles synthesized from technology into a philosophy, principles, and methods through an out-of-school education system involving adults and youth.
Singh & Nayak (2009)	Extension Education is a form of educational delivery for rural populations outside the regular classroom context with the aim of creating social and cultural development.
Mwansa & Chakanika (2019)	Extension Education is a platform for the delivery of knowledge, skills, and values from one generation to another.

Table 1 clearly demonstrates the consensus among multiple researchers that Extension Education pertains to the dissemination of information in the fields of agriculture and education systems outside the traditional school setting. Nevertheless, in keeping with the advancements of the twenty-first century, this field can be applied to and extended into several fields, including the development of employment, schooling, and research (Sichula, 2016). The phrase development is derived from the Latin word 'tensio' which means 'expansion,' and the prefix 'ex' denotes 'out.' Development is the educational process that utilizes physical and biological scientific discoveries, along with social science principles, to bring about changes in knowledge, skills, attitudes, and practices of individuals in a non-school setting, to achieve improved living standards (Das et al., 2014).

Relying on the idea of "assisting others, assisting oneself," the philosophy prioritizes practical learning and active engagement (Das & Tripathi, 2014). Practical experiences facilitate the intended activities, as they embody the principles of "learning by doing" and "seeing is believing." In addition to other significant educational subjects, this discipline comprises home economics, health, and sciences. Crucially, Jones and Garforth (2005) verified that Extension Education is crucial for education. According to Mwansa et al. (2019), the transmission of knowledge, skills, and values from one generation to another is of utmost importance. The main objective is to encourage people to improve their quality of life, (Das & Tripathi., 2014; Ibe & Chukwuma., 2022). Extension Education overcomes this by emphasizing practical skills that may be used outside of traditional schools (Singh & Rai, 2018; Mwansa et al., 2019). In the words of Scheer (2020), Extension Education's main goal is the development of human resource.

Further study is required to ascertain how the aspect of human resources development may effectively include fundamental elements in the field of Extension Education (Scheer, 2020). The sustainability of individual generic development has been thoroughly examined in the generic discourse, particularly within the realm of higher education (Ploum et al., 2018). However, it is crucial to conduct research from the perspective of the student to evaluate the efficacy of discourse in identifying a particular form of competence (Lambrechts et al., 2018). This research also casts questions on the validity of the accepted generic skills paradigm (Ploum et al., 2018).

Gaining a deep understanding of the aim and organization of educational processes is crucial for acquiring information and meeting the needs of both the community and individuals (Mwansa et al., 2019; Nisha, 2006; Chakanika et al., 2016). By incorporating youth into research teams and employing efficient research methodologies, it is possible to boost the development of youth and enhance the quality of academic research on juvenile matters (Powers & Tiffany, 2006). Youth involvement, as defined by Lawson & Lawson (2013), refers to the impact of ecological forces on the structure of organizations and educational objectives. This corroborates Zyngier's (2008) claim that learning can be advantageous for youth as it enables them to investigate concepts beyond the confines of formal education.

Youth Development through Extension Education Practice

According to Harder (2009), the curriculum-driven program of formal Extension Education is essential in guaranteeing that students possess the necessary skills to fulfill the requirements of Professional Development. Kelly (2009) asserts that successful curriculum development serves as the logical basis for educational initiatives. For a deeper comprehension of the Extension Education process, several design models have been used. These include the conceptual framework model (Boone, Safrit & Jones, 2002), the logic model (Taylor-Powell & Henert, 2008) and the Interactive Model (Caffarella & Daffron, 2013). The goals and evaluations of development programs can fall short of predetermined success standards, even if a variety of models have been applied to reflect, evaluate, and investigate the processes and developments linked to Extension Education concerns (Scheer, 2020). Scheer (2020) contends that although youth development is one of the top-priority philosophies indicated in Extension Education, the models used to reflect the subject do not highlight features of target groups, such as an emphasis on youth development. To guarantee that youth development is in line with the skills needed in the 21st-century workforce, it is important to engage them in practical peer education activities from the start (Groff, 1992; Cochran et al., 2010).

Particularly, youth constitute a generation that enhances efforts as agents of expansion to broaden the sphere of development (Scheer, 2020) via educational initiatives like volunteerism and community service (Gibby et al., 2003), well-being (Ripberger et al., 2009; Arnold et al., 2016), and scientific knowledge studies (Smith et al., 2004). Given the conversation thus far, if human resource development is thought to be an essential component of the field of Extension Education's smooth operation—as stressed by Clark (1987) and Scheer (2020)—and if these goals can be effectively carried out in formal educational settings (Nwabuaku et al., 2017), then postgraduate programs are among the avenues that might be explored to find out how Extension Education may serve as a practical focus on youth, as stated in the Das et al. (2014) debate.

The implementation of community development in Extension Education has expanded beyond agricultural areas, emphasizing students' involvement in this field (Narayanasamy, 2001; Banda, 2019). The primary purpose of this approach is to cultivate knowledge that can improve the abilities of individuals to address problems through self-empowerment and self-efficacy (Chakanika, 1989; Suvedi and Kaplowitz, 2016).

Debates on research and postgraduate self-efficacy typically revolve around concerns including the workplace, psychology or counseling, doctorate education, the adult age group, and self-efficacy in medicine or nursing. Insufficient data is reported regarding the impact of postgraduate degrees, such as Master's and Doctor of Philosophy programs, on the self-confidence of youth. Van Blankenstein et al. (2019) proposed that engaging in learning processes such as writing, reviewing, and editing in youth research and experiments can enhance youth' self-efficacy. In rewarding circumstances, he demonstrated how the interconnected criteria highlight a student's inherent aptitude. To effectively apply their research findings to real-world problems, youth must maintain a high level of academic proficiency during their postgraduate studies. Researchers with a vested interest in the phenomena being studied work together to create shared knowledge (Orlowski et al., 2015). This content provides a platform for youth to develop and improve their research, communication and others development skills. Incorporating youth into this educational process is crucial for them to comprehend their challenges and aptitudes (Hawke, 2020).

Methodology
This study utilizes qualitative research with a case study methodology to explore how the process of learning on the extension education platform promotes the positive development of youth. For the purposes of for gathering data, the researchers carry out semi-structured in-depth interviews and review pertinent documents. The careful selection of informants is essential in qualitative research to acquire comprehensive and profound insights (Silverman, 2013). Therefore, the researchers employ purposive sampling in order to guarantee the identification of appropriate informants.

This concept paper enhances the field of Extension Education by furthering knowledge on deliberate cultivation of transferable skills within the education system, in line with the discipline's philosophy of passing on communication, skills, and values across generations, with a specific emphasis on young people. During the knowledge development process, the Youths are provided with the opportunity to not only express their opinions or thoughts on a topic, but also to enhance and refine their own abilities in order to achieve the objectives of the study. Therefore, it is crucial to consider the input of young people in the process of acquiring knowledge, as it helps us understand their obstacles and abilities from their own

point of view (Hawke, 2020). As a result, Extension Education is positioned as a crucial platform for fostering this potential.

Theoretical Framework

As a means of developing a variety of skills and monitoring learning advancement, self-efficacy is a critical component of the learning process in formal education (Cahyani & Winata, 2020). Self-efficacy, as defined in Cognitive Theory (1986), refers to the development of an individual's sense of self-worth and their ability to adapt effectively to environmental changes through various activities. LaRocca (2017) states that individuals set goals during the learning process to address various situations, especially those related to academic matters and actions that influence societal progress. The four fundamental tenets of self-efficacy theory—mastery experience, vicarious experience, verbal persuasion, and affective state—are usually the foundation for determining these goals (Bandura, 1997), as illustrated in Figure 1 below:
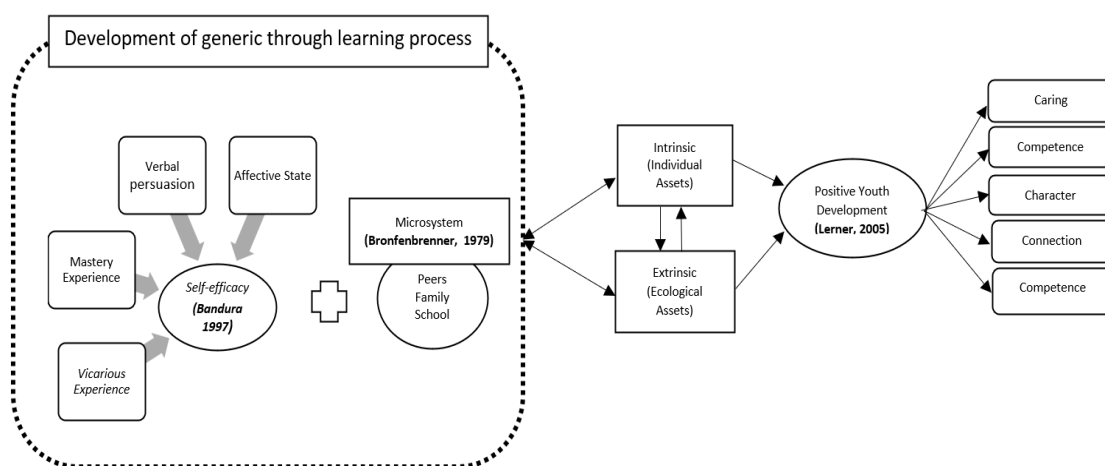

Figure 1: Theoretical Framework of Extension Education as a Practice of Youth Development

A sense of self-efficacy requires an intrinsic factor that motivates individuals to strive for the achievement of a specific objective; this component is especially vital in the context of knowledge acquisition, specifically in e-learning environments (Pumptow & Brahm, 2020). Serin (2018) highlights the significance of inherent variables in the cultivation of individual abilities, whereas Saygili (2018) underscores the role of external influences, referred to as the ecological system, in establishing a favorable atmosphere for self-improvement. As a result of the interdependence between self-efficacy and ecological support, any objective of self-development must be accomplished by striking a balance between environmental and internal factors. In its basic form, acknowledging and addressing both internal and environmental influences foster a conducive environment for personal growth.

For the purpose of promoting self-efficacy in a roundabout way, Blankenstein et al. (2019) highlights the importance of providing young people with opportunities and autonomy that can be experienced through the research process. Particularly when it comes to the formation of major relationships and the nurturing of a robust sense of social reliance, this is something that is especially true. The potential to learn general abilities can be developed by enabling youth to actively design solutions for each task, a process referred to as self-regulation (Jain & Dowson, 2009; Jansen et al., 2019). In other words, self-regulation is a method that can

promote proactive general learning, especially in learning environments that rely on the use of online technology (Littenberg & Reich, 2020).

According to Powers and Tiffany (2006), the participation of young people in research groups, along with the utilization of efficient research techniques, has the potential to generate possibilities for youth development and to improve the quality of scientific research on issues that are relevant to the lives of youth. Lawson and Lawson (2013) state that the conceptualization of youth engagement through a broader scope is as an indicator that ties their ecological effects to the organizational structure and aims of the school system (Lawson & Lawson, 2013). To properly understand this ecological perspective, it is necessary to differentiate between involvement in the classroom, involvement within institutions, and involvement outside of institutions, such as in the community environment. According to Lawson and Lawson (2013), the purpose of these acts is to build and develop social educational experiences and opportunities for youth, enhance their capacities, and foster their personal development in a more comprehensive setting. This goal is in line with the points of view made by Zyngier (2008), who suggested that the involvement of youth should not be restricted to the pre-structured education system. Instead, youth should be regarded as individuals who are proactive in taking advantage of and creating chances.

Through this discussion, Holland et al. (2010) argue that youth participation in research is a strategy that has the potential to empower the development and capabilities of this generation. However, the limitations and possibilities of this strategy are frequently debated due to concerns regarding the nature and personality of the youth in comparison to the adult generation. According to Wilkinson and Wilkinson (2018), participation in research is a platform as a practice that helps generate common knowledge. However, this does not make youth involvement a major issue because participatory research can be used to highlight and improve youth development assets. These assets include the following: (1) the capacity to think critically; (2) the ability to construct a social network that encompasses a broad knowledge base; (3) leadership skills as agents of change; and (4) specific skills such as writing, analyzing, presenting, and advocacy (Powers & Tiffany, 2006).

Soobard et al. (2018) assert that one of the most important ways to maximize the potential of youth is to assist them in making the most of their ability. Concurrently, it is of the utmost importance to conduct rigorous evaluations to guarantee the comprehensive development of all parts of their talents. According to Salehi et al. (2013) and Garavand et al. (2014), educational research offers a method for engaging in and gaining an understanding of the process of strengthening. By providing a practical medium that indirectly encourages the development of general abilities, research settings make it possible for youth and adults to freely participate in activities together, which ultimately leads to the building of trust between the two generations. It is necessary for youth, particularly those who are in postgraduate circles, to have an understanding of the significance of doing research investigations that are successful in investigating the functions and requirements of the community.

As a result of their expertise, they are in a position to play a key part in the development of scientific services, the implementation of positive social change, and the formulation of significant policy decisions (Tiyuri et al., 2018; Racheal et al., 2019). By actively participating in research processes, the primary emphasis is placed on the considerable power of youth to promote positive societal change and contribute to the formulation of informed policy.

It is crucial to highlight the significance of the approach of providing a practical space for the application of skills in settings that are typical of the actual world (Wu et al., 2016). This is being done in the context of the discussion that is taking place on the development of youth.

According to Peréa et al. (2019), the most important objective of the learning process is not to achieve excellent results; rather, the focus is on how this process can be applied in real-world practical settings to cultivate a sense of responsibility and awareness that their actions will determine the level of success that can be achieved. This is the reason why this is the case. The viewpoint presented here is in agreement with the Positive Youth Development model proposed by Lerner et al. (2007). According to this paradigm, there are three essential components that must be present in order to achieve comprehensive youth empowerment. The most important components include long-term, positive interactions between adults and young adults, activities that focus on developing skills, and the active participation and leadership duties of the youth. Lerner et al. (2005) state that activities or programs that implement these three components indirectly help the development of the "5C" aspects. These elements are factors that contribute to positive youth development, which ultimately leads to effective adult development. According to Lerner et al., (2000) and Roth and Brooks-Gunn (2003), the aims and outcomes of PYD program are matched with five important components: competence, confidence, character, connection, and caring.

Youth development can be effectively promoted through the strategic integration of these components, and scientific research on topics that have an impact on the lives of young individuals can be advanced through this integration. The development of youth can also be viewed through the perspective of improving research potential, as this discussion has demonstrated. This is a practical technique that opens a forum as part of a research partner, and it also allows for active engagement throughout the learning process, which is considered to be a methodological approach (Jagosh et al., 2012; Simonds et al., 2013). Both of these approaches are considered to be valuable in the field of research. Peek et al. (2016) state that this activity is also considered to be a democratic method that is capable of boosting youth participation in the research process. The fundamental objective is to create an environment that is both all-encompassing and collaborative, to equip young people with the ability to actively participate in research endeavors and their personal development.

Conclusion

Through a discussion of the ways in which Extension Education might improve youth development across the Postgraduate programs, the purpose of this concept paper is to make a contribution to the current body of knowledge in the field of youth development. This field of study is founded on the fundamental premise of facilitating the transmission of communication, skills, and values from one generation to the next (Mwansa et al., 2019), with a specific focus on the youngest members of the population.

According to Kelsey and Hearne (1963) and Ibe and Chukwuma (2022), Extension Education is widely regarded as an outstanding platform for cultivating and improving capabilities of this potential. In the sphere of research, particularly, the participation of young people in postgraduate studies can be an extremely beneficial component of the PYD academic program. There are several advantages that can be gained from participating in this program, including the enhancement of possibilities, the development of skills, the empowerment and socialization of young people, and an increase in the validity of research in relation to the environment.

Perea et al. (2019) explain that youth participation in a development program is a relevant practical method for learning and implementing skill development in a real-life context. This is an important step in the process of producing more young people who are well-rounded in terms of their knowledge, abilities, and ability to deal with a variety of situations. By actively

participating in the process of learning or conducting research, the adults who are responsible for these young people are required to take on the role of facilitators who are able to foster the development of skills through their participation in activities that can take place at the individual, organizational, and community levels (Cardarelli, 2021). As a result, this youth involvement can be defined as an opportunity to apply skills (such as leadership skills and organizational skills) in a real-life environment through the supervision of experienced adults. This is done with the intention of indirectly recognizing the voice of youth with the purpose of instilling a sense of superior self-confidence

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