

The Relationship of Teachers' Leadership Competency With 21st Century Teacher

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Abstract

The aim of this research is to look at the link between teachers' leadership competency with 21st-century teachers teaching skills during COVID-19. A 21st-century teacher must be proficient in employing a form of technology tools to unravel problems, make informed decisions and generate new knowledge. The quantitative approach has been applied in this study to examine the significant relationship of teachers' leadership competency with 21st-century teacher teaching skills during COVID-19 at secondary schools. A survey was used by the researcher to collect the data. Frequency distributions, descriptive statistics and correlations were used to analyze the findings. The cluster random sampling type in probability sampling was used for this study because only one district of five secondary schools was selected. This study participated in only 50 teachers from various subjects and positions to examine the significance relationship.

Keywords: Relationship, Leadership, 21st Century.

Introduction

In Malaysia national schools learning and advancement abilities are progressively being perceived as spaces that different understudies who are ready for a more mind boggling life and workplaces inside the 21st century from those that aren't. According to Ahmad (2020), a focus on 4C's which are innovativeness, basic reasoning, correspondence and joint effort is imperative to orchestrate teachers for the more extended term. The Prime Minister of Malaysia has reported a total of RM54.6 billion (MOF, 2013) for the instruction area to improve innovation use in Malaysian schools. Numerous projects are featured by means of PC lab ventures by the Ministry of Education to flexibly open doors for all public schools to acknowledge 21st century aptitudes (Stone, 2020).

According to Abdul Halim (2020), school pioneers assume exceptionally critical part towards the achievement of their schools. Pioneers likewise assume a significant part to ensure 21st century educator actualize 4C's inside the homerooms. They convey incalculable

duties to deal with the school organization matters like spending plan and schedules, understudies' order and participation, co-educational program exercises, instructing, offices, security, enrolment and observing of instructors, appraisals, educational program, instructing and learning materials, associations with educators and understudies and correspondence with guardians and furthermore the encompassing network (Shen & Cooley, 2013).

However, the link of teachers' leadership competency with 21st century teachers teaching skills is a challenging experience. To fulfill the competency effectively, teachers have to undertake some new approaches because the resolution to reinforce the facility of leadership for learning with the current situation of COVID-19 (Bernama, 2020). As according to Dhawan (2020) all over the world education has to shift from traditional teaching skills to virtual way.

Background of the Study

Teacher leadership doesn't just include educators based places of intensity and authority officially however tend towards level of information and aptitudes (Muhammad Faisal et al., 2011). Instructor initiative ascribes comprises of information, aptitudes and qualities appeared by educators who positively affect understudy learning both official and informal, in the homeroom or outside the study hall (Lu, 2014).

Besides that, 21st century instructors are needed to build up the abilities that may empower them to amplify the use of the innovation as a training asset to help understudy learning and to compose understudies to ace high innovation society, inside which ways of life, perspectives and aptitudes are tested every day (Nappi, 2014). To understand this, there is a longing for broad readiness, sufficient time, and progressing support for educators to ensure they need the information, aptitudes and trust in instructing with ICT (Mulyono, 2020).

However, there are only a few studies conducted to look at the connection of teachers' leadership competency with 21st century teacher. Thus, the researcher has analyzed the teachers' competency level of leadership and 21st century teacher leadership by examining the importance relationship as well.

Statement of the Problem

The main aim of 21st century teacher is relies on the connection of teachers' leadership competency. The achievement or disappointment of a school frequently depends on the viability of authority (UNESCO IESALC, 2020). Administration could be a force for change tries by remembering all 21st century educators' for schools and offering all instructors open entryways for responsibility and accomplishment (Remuzzi & Remuzzi, 2020).

According to Syed Ismail Syed Mohamad (2015), many national schools today face the challenge for education leaders. Although the demand for 21st century skills has spawned a decent deal of enthusiasm, yet there are challenges for 21st century teacher remains firmly into the implementation. The Malaysian instruction framework got analysis from guardians moreover businesses, who voiced their anxiety with respect to whether our training framework is a situation to satisfactorily plan Malaysian understudies for the forthcoming difficulties of the 21st century (Wahdain & Ahmad, 2014).

Moreover, continuous efforts been administered to boost Malaysian 21st century teacher, but the usage of ICT in schools falls behind desires regarding amount and quality (Fong et al., 2013). Considering a MOE study finding in 2010, only 33% of understudies realize that their educators are using ICT regularly in their empowering cycle disregarding the way

that ICT can animate the instructional cycle, in any case, this potential has not yet been refined (Ministry of Education Malaysia, 2012).

In view of the criticism on the Auditor General Report 2013, Series 3 (Ministry of Finance, 2014), the degree of Virtual Learning Environment (VLE) utilization among Malaysian educators is low (in the scope of 0.57% to 4.69%). It's generally recognized that innovation is growing quickly. On the off chance that 21st educators don't appear to be prepared with sufficient and most recent information and abilities, they probably won't have the option to stay up with the ever-changing innovation and definitely will be abandoned and unfit to ace it (Umar & Mohd, 2014). This issue of low and moderate take-up of 21st century usage of ICT among teachers has inspired the researcher to pursue groundwork by investigating the connection of teachers' leadership competency with 21st century teachers teaching skills in Kuala Kubu Bharu district national schools.

Purpose of the Study

School leader need experts who are socially equipped, gifted, creative and imaginative issue explains, talented and basic scholars. A 21st century educator must be capable in utilizing a type of innovation apparatuses to disentangle issues, settle on educated choices and produce new information. However numerous teachers do not have the required abilities themselves to be agreeable in assuming an influential position (Wenner & Campbell, 2017). This research only focuses on the relationship of teachers' leadership competency with 21st century teachers teaching skills. This research aims to look at the link between teachers leadership competency with 21st century teacher and analyze the challenges of teacher leadership competency with 21st century teachers teaching skills. The point of this investigation is to break down the teacher leadership competency with 21st century teacher.

Research Objectives

The objectives of this study are as follows

- To analyze the competency level of teacher leadership in Kuala Kubu Bharu district secondary schools.
- To analyze the teachers' leadership competency with 21st century teachers teaching skills in Kuala Kubu Bharu district secondary schools.
- To examine the significance relationship of teachers' leadership competency with 21st century teachers teaching skills during Covid-19 at Kuala Kubu Bharu district secondary schools

Research Questions

The questions of this study are as follows:

1. What is the competency level of teacher leadership at Kuala Kubu Bharu district secondary schools?
2. What is the 21st century teachers teaching skills level at Kuala Kubu Bharu district secondary schools?
3. Is there any significance relationship of teachers' leadership competency with 21st century teachers teaching skills during Covid-19 at Kuala Kubu Bharu district secondary schools?

Hypotheses

The hypotheses of this study are as follows

- H₁: There is no any relationship of the competency level of teacher leadership at Kuala Kubu Bharu district secondary schools.
- H₂: There is no any relationship of 21st century teachers teaching skills level at Kuala Kubu Bharu district secondary schools.
- H₃: There is no any relationship of teachers' leadership competency with 21st century teachers teaching skills during Covid-19 at Kuala Kubu Bharu district secondary schools.

Significance of the Research

According to Dhawan (2020), the 21st century teacher features an alternate heading contrasted with the earlier century. Instructor authority competency with 21st century educator is foreseen to give results to understudies and schools who are prepared to enter the post-mechanical period (industrial resolution 4.0). Although teachers know there is a necessity for them to inspire the learning process for their students, yet, there are still a number of them who face challenges in adopting and implementation of the 21st century skills (Azmi Hassan, 2020). According to Shen & Cooley (2010), there are four characteristics a 21st century teacher should have, namely: (1) Critical Thinking and Problem Solving; (2) Creativity and Innovation; (3) Communication; (4) Collaboration. It is significant as it attempts to research the teacher leadership competency with 21st century teacher. Moreover, the researcher wants to grasp how far the relationship of teachers leadership competency with 21st century teacher in national secondary schools. Therefore, this study will use Niche-Malaysian Teachers' Leadership Competency Instrument (Strengthening Center for the Teaching Profession, 2009). The school leaders will also benefit through this study and thus, improve and bringing one step closer to Vision 2020 (21st Century). Besides, there are not many examinations researching the relationship of instructors' authority competency with 21st century educator. This gap within the literature is narrowed by this study.

Operational Definitions

The key terms that are most pertinent to the current study are as follows

- Relationship: To understand the differences or similarities between teachers' leadership competency with 21st century teacher connection. Hence, to know whether the relationship of independent and dependent variable is positive or negative statement (Galland, 2008).
- Teachers' leadership: It alludes to showing administration practices inside and outside of the homeroom and partaking during the time spent making a learning-centered culture in school; partners propelling on one another; and the turn of events, usage, and assessment of excellent instructing rehearses (Katzenmeyer & Moller, 2009).
- Competency: It refers to the necessities of a 'competency-based' instructor training and incorporates the information, abilities, and qualities an educator must show for effective consummation in instruction (Houstan, 1987).
- 21st century teacher: A teacher, who should be a master of technology in the classroom, knows how to collaborate, adaptive, a lifelong learner and advocates for their profession. The teacher should have 4C skills which are; creativity, critical thinking, communication and collaboration (Shen & Cooley, 2010).

- Teaching skills: It refers to the current embrace range of competencies, including critical thinking, problem solving, creativity, meta-cognition, communication, digital and technological literacy, civic responsibility and global awareness (UNESCO, 2016).
- Covid-19: The term Covid-19 is an abbreviation of Corona (CO), Virus (VI), Disease (D) and 2019 (19) which marks the first time the virus appeared in 2019 in Wuhan, China. The typical symptoms of Corona Covid-19 such as cough, fever, difficulty in breathing, muscle aches, until fatigue (WHO, 2020).

Limitation of the Study

There are a few limitations of the study can be identify. The first is the limitation of respondents. The respondents of this study were the teachers in the secondary national schools in Kuala Kubu Bharu district. The genders, years of teaching and the length of periods that they have been working in that school might have some significance difference.

The second limitation is the sample size. The sample size of the study can be considered as small because it is limited to 50 samples only. Besides, the third limitation is the place of the study which was conducted. The survey was only conveying in the secondary schools in Kuala Kubu Bharu district only not in the whole state of Selangor.

Leadership

According to Faridah (2011), leadership is a term commonly comprehended by the lion's share as normal for an individual who can lead an association in accomplishing its objectives. Typically individuals partner the term with the individual at the administration level of an association. For an instructive association, the directors, for example, the school head, superintendent and senior partner are typically expected to have administration aptitude (Gu Saw Lu, 2014). Earlier exploration on school authority had put a lot of spotlight on the head, dean and senior associate as head of the school (Anderson and Glen, 2004; Wenner & Campbell, 2017). In any case, research by Botha (2013) has discovered that chiefs just had negligible direct impact on understudy execution which most impacts will be followed to backhanded causes like the chief's effect on instructional objectives and school atmosphere.

Teacher Leadership

According to Khan & Malik (2013), quick advancement in instructive setting requires that those to a great extent engaged with study halls exercises additionally have authority ability to improve their viability. Also stated by Nappi (2014), educators must be set up with qualities, information and aptitudes that will empower them to design, arrange and actualize different undertakings in their calling. Educator initiative had been found to have alluring sway on school improvement, school suitability and instructor spirit. Along these lines, it is significant that educators are prepared to have some initiative attributes to guarantee their adequacy in playing out their obligations.

"Instructor initiative is that the cycle by which educators, independently or altogether, sway their accomplices, overseers, and various people from the school organization to improve instructing and learning practices with the purpose of extended understudy learning and achievement" (Danielson, 2013). Instructor pioneer as characterized by Katzenmeyer and Moller (2009) is an educator who can 'lead inside and past the study hall, impact others towards improved instructive practice, and relate to and add to a network of instructor pioneers'.

However, Jamil & Shah (2011) mentioned that meanings of educator authority have been proposed and incorporate both casual and formal jobs. Be that as it may, Yukl (2013) clarifies the unpredictability of characterizing instructor administration. Analysts concur that educator chiefs can improve educating and learning, similarly as the school atmosphere and the calling (Nappi, 2014).

According to Andrews, Crowther, Hann and McMaster (2002: 25), who have developed a 'Teachers as Leaders' structure which includes the centrality of two keys factors focusing in on the authority of instructors, to be explicit the characteristics based and power-based of instructors' instructional practices and their ability to make new significance in the lives of people in schools and organizations. However, Faridah (2011) contended that administration of schools is past the limit that shared work by instructors won't, the only one, lead to changed teacher practices and improved learning among understudies. She acknowledges that to attract teachers advantageously in power there must be whole schools revolve around change and improvement.

York-Barr and Duke (2004) set up a structure for educator administration dependent on their exploration that incorporated the accompanying attributes of an instructor chief; regarded as an educator, learning focused, and possessing initiative limits. Wanner and Campbell (2017) developed the work finished by York-Barr and Duke to some degree to figure out what had changed since they distributed their unique writing survey. They found that the meaning of instructor initiative stayed as hazy as it had been notwithstanding a few headways; a few states had actualized commands for educator quality norms, Teacher Leader Model Standards had been made, and a lot of Teacher Leader Competencies had been distributed by them.

However, according to Teacher Leadership Exploratory Consortium (2011) there are various forms of functions of educator pioneers including regulatory, communitarian, educational, and research jobs. Managerial jobs incorporated those exercises which helped in the everyday activities of the school just as certain assignments which focused long haul objectives of the association. Instructor pioneers likewise work with executives, assisting with creating instructive approaches and plans for development. Instructors drew in cooperative jobs went about as tutors, mentors, or coaches, offering data and groundbreaking plans to the network. Educational jobs were centered on founding the most ideal instructional practices for the instructor chief's particular school by choosing course books, creating educational plan, and aiding the execution of new instructional projects. Instructor pioneers acting in research jobs led examinations pointed delivering answers for issues in their schools by participating in real life exploration and investigation of school and understudy information. At last, been analyzed the manners by which these administration exercises can be refined by instructors in both formal and casual jobs.

Teachers' Leadership Competency

Competency is characterized as "having essential or sufficient capacity or characteristics" (Merriam Webster, 2011). For educators, these capacities incorporate information on content issue, teaching method, study hall the executives, and general organization. As indicated by Katzenmeyer and Moller (2009), "in the event that an educator isn't capable in proficient abilities, at that point the spotlight in the study hall is on daily endurance. This educator should create homeroom skill before driving others past the study hall (p.43)". Alongside believability and congeniality, Kho, Hamidah Yusof & Syed Ismail Syed Mohamed (2015) recognized educator competency as a significant part of instructor administration. According

to Yukl (2013) recognized the information and abilities of educational program, instructional method, and understudies evaluation as basic capabilities required before educators can accept influential positions. However, Wenner & Campbell (2017) focused on the significance of instructor competency by expressing "one can't be a compelling educator pioneer on the off chance that one initials a cultivated educator (p.122)".

Therefore, as Lu (2014) stated that competency includes conventional abilities, essential aptitudes, fundamental abilities and individual aptitudes which allude to information and abilities just as the mentality of a person. All in all, competency is the mix of information, exertion and experience which empower a person to finish an assignment impeccably (Khan & Malik, 2013). As indicated by UNESCO (2016), competency is characterized as the blend of information, abilities and individual attributes which ought to be possessed and polished so as to finish a specific errand or position. Abilities strengthen each other from essential to progress as learning advances; the effect of expanding skills is synergistic, and the entire is more noteworthy than the whole of the parts (Council on Education for Public Health, 2006). Instructors' competency contains individual, expert and social viewpoints, for example, educating, as a specialist in the subject identified with educating and learning, as a specialist in speculations identified with instructing and picking up, overseeing learning measures and adjusting in the network (Klassen & Chiu, 2010).

Niche-Malaysian Teachers' Leadership Competencies Instrument (NMTLCI)

Teachers' Leadership Competencies can be measured by five indicators. They are; facilitating improvement and establishing standards, modeling leadership attributes and skills, participating in organizational development, fostering a collaborative culture and performing as referral leader (Hamidah & Syed, 2015).

According to Katyal and Evers (2004), the first element of NMTLCI; Facilitating Improvement and Establishing Standards was constructed based on the third role of teacher leaders, 'Strive for pedagogical excellence' as listed in the Teacher as Leaders Framework. It emphasizes on improving teacher's instructional practices while taking into consideration diverse student's learning need.

According to the Centre for Straightening the Teaching Profession (2009), the second element of NMTLCI; Modeling Leadership Attributes and Skills was constructed based upon teacher leadership definition. The centre defined, teacher leadership as 'Knowledge, skills and dispositions demonstrated by teachers who positively impact student learning by influencing adults, formally and informally, beyond individual classrooms. Therefore, teacher leaders must possess common leadership values, leadership knowledge and leadership skills in order to lead.

Based on Teacher Leadership Exploratory Consortium (2011), the third element of NMTLCI; Participating Organizational Development was developed based on the fifth domain in the Teacher Leader Model Standards. Leaders need to have the competency to assist their principals or colleagues in utilizing multiple assessment tools aligned to state and local standards, aimed at improving student achievement.

According to Danielson (2013), teachers should work with their colleagues for the betterment of the school and getting involved in 'professional community'. The fourth element of NMTLCI; Fostering a Collaborative Culture was identified based on the fourth domain of Danielson's Framework for Teaching Evaluation Instrument. It means that as the head of the school who is known as principal should utilize his highest potential to appoint

competent teacher leaders, who have the leadership values, knowledge and skills, to successfully lead their colleagues towards achieving school's goal.

According to Knapp et al. (2003), teacher leadership is the act of imparting purpose to an organization as well as motivating and sustaining effort in pursuit of that purpose (p.13). The fifth element of NMTLCI; Performing as Referral Leader was identified based on The Teachers as Leaders Framework (Crowther, 2008). Therefore, teacher leaders must continuously polish their talents as instructional experts, to enable them to guide their colleagues to overcome instructional issues in order to make informed decisions that improve learning for all students (Wenner & Campbell, 2017).

21st Century

According to Rainey & Yuan (2010), 21st century is described with stunning advancements in data innovation. Advancement in PC and web innovation specifically has throughout the long term changed all part of human exercises. The combination of these innovations in financial and political foundations is bit by bit making human cooperation's increasingly more subject to these mechanical turns of events. In this manner, expanding human connection with PCs and web, making information and abilities of utilizing these advancements is an essential need for a 21st century instructor.

Therefore, 21st century has been characterized as the information, aptitudes and perspectives important to be serious in the 21st century labor force. Aside from encouraging the everyday general organization of schools; ICT has boundless expected use in the genuine cycle of educating and learning. The World Wide Web got to through the web PC and portable internet browsers give educators wide assortment of boundless data that can be gotten to whenever anyplace. Instructors can get to online information that can help them in their activity plan, improve the substance of their activity note, learn new systems and strategies for educating; and, update their knowledge into showing technique and subject substance. The online electronic media social occasions outfit teachers with a phase for joint exertion in instructing and learning at close by and worldwide level; and help to expand correspondence and discussion among instructors and understudies past investigation lobby.

In Southeast Asia, Singapore, and Malaysia are at a further developed stage in their push to tackle the possibilities of ICT in instruction (UNESCO, 2020). By and large, residents to these nations approach web association at home, grinding away, out in the open spots and in schools (UNESCO, 2016). Pretty much every family approaches PCs associated with web for family use notwithstanding other processing gadgets, for example, PCs and advanced cells (Stone, 2020). Subsequently, youngsters are hence commonly brought into the world with admittance to innovation of the 21st century (Nazri, 2020). The utilization of computerized of data innovation is at the center focus of the learning framework; and 21st century educators fit utilizing innovation to connect with students in innovation based learning exercises in and outside the study hall (Ministry of Education Malaysia, 2012). Accordingly constructing the ideal 21st century learning and climate for 21st century advanced has been worry of partners in the training area (Mulyono, 2020).

21st Century Teacher

According to UNESCO IESALC (2020), a twenty first century educator is needed to build up the abilities that will empower them to boost the utilization of the innovation as an encouraging asset to improve understudy learning and to get ready understudies to ace high innovation society, in which ways of life, mentalities, and aptitudes are tested day by day (Ministerial

Advisory Council on the Quality Teaching, 1995). To accomplish this, there is a requirement for broad readiness, satisfactory time, and progressing support for instructors to guarantee they have the information, abilities, and trust in educating with ICT.

Therefore, as stated by Haslindar (2020) getting instructors to use development as a 21st century approach to manage teaching and learning exactly as expected of the 21st century instructors in dealing with the enlightening pattern of the serious is fundamental in building 21st century learning atmosphere. Having 21st century teachers is significant in dealing with the 21st century understudies who are portrayed with; restricted capacity to center, performing different assignments, and the hankering for speed in correspondence and getting to information using progressed development; tendency for basic reasoning activities, social learning and unhindered occasion to the usage of advancement for learning (Azmi, 2020). 21st teachers as such are needed to have a fair data and cognizance of 21st century understudies' association with development and how they oversee it in their learning cycle (Remuzzi & Remuzzi, 2020).

21st Century Teachers' Teaching Skills

Based on UNESCO (2016), the training conveyance framework substantially affects the manner by which 21st-century abilities create in students. Instructional method, educational program, school rules and atmosphere, evaluations, and benchmarking expertise procurement are generally key factors in the manner 21st-century aptitudes create and are checked. By the by, the homeroom is the essential climate where the previously mentioned factors finish to bring information securing and aptitudes advancement (Azmi, 2020).

According to UNESCO (2020) the homeroom is where students notice the demonstrating of these aptitudes by their instructors and can rehearse them-selves. Thusly, it is similarly critical to plan and prepare instructors in the securing of 21st-century aptitudes as well as the scattering of these abilities. Estimating the study hall cycles and educator rehearses that are empowering and supporting the improvement of 21st-century aptitudes in the homeroom can fill in as a significant initial step.

Relationship of Teachers' Leadership Competency with 21st Century Teacher

Gu Saw Lu (2014) mentioned the 21st century educator has to realize how to give innovatively upheld learning occasions to understudies and skill to innovation can uphold understudy learning. There are five abilities reflect as a 21st century educator. They are; educators show initiative, instructors set up a deferential climate for a differing populace of understudies, instructors realize the substance they educate, educators encourage learning for their understudies and instructors ponder their training (Nazmi, 2020).

However, Hamidah & Syed (2015) stated that the fundamental concentration in this investigation is relationship of instructors' initiative competency with 21st century educator. Accordingly, instructors show administration is more to driving in the study hall by assessing understudy progress utilizing an assortment of appraisal information estimating objectives; attracting on proper data to make homeroom and instructional plans; keeping up a shielded and exact investigation corridor that supports understudy learning; and positive organization of understudy direct, effective correspondence to defuse and deescalate troublesome or risky conduct, and protected and fitting confinement and restriction procedures (Anuar, 2020).

Other than that, instructors show authority in school by participating in communitarian and collegial master learning works out; perceiving the characteristics or essential segments of a school improvement plan and demonstrating an ability to use appropriate data to

recognize zones of need that should be tended to in a school improvement plan (Malaysian Education Ministry, 2014). Educators lead the indicating calling by looking into capable unforeseen development and advancement works out; and making capable associations and associations (Kementerian Pendidikan Malaysia, 2014). Teachers advocate for schools and understudies by executing and adhering to game plans and practices firmly impacting understudies learning (Haslindar, 2020).

Covid-19

According to UNESCO (2020), the dangerous and irresistible sickness Corona Virus otherwise called Covid-19 has profoundly influenced the worldwide economy. This misfortune has additionally stirred up the education area, and this dread is probably going to reverberate across the training area universally. The Covid-19 pandemic flare-up constrained numerous schools and universities to stay shut briefly. A few territories are influenced worldwide and there is a dread of losing this entire continuous semester or much more in the coming future. Different schools, schools, and colleges have ceased face to face educating. According to the appraisal of the scientists, it is dubious to return to ordinary educating at any point in the near future. As social removing is superior at this stage, this will affect learning openings. Instructive units are battling to discover choices to manage this difficult circumstance. These conditions cause us to understand that situation arranging is a critical requirement for scholarly foundations (Rieley, 2020). This is a circumstance that requests mankind and solidarity. There is a pressing need to ensure and save our understudies, personnel, scholastic staff, communities, social orders, and the country in general.

A few contentions are related with e-learning (Bernama, 2020). Openness, moderateness, adaptability, learning teaching method, long lasting learning, and strategy are a portion of the contentions identified with online teaching method (Dhawan, 2020). According to Abdul (2020), it is said that online method of learning is effectively available and can even reach to provincial and distant territories. It is viewed as a generally less expensive method of schooling as far as the lower cost of transportation, convenience, and the general expense of foundation based pick up. Adaptability is another intriguing part of internet learning; a student can timetable or plan their time for fruition of courses accessible on the web. Consolidating eye to eye addresses with innovation offers ascend to mix learning and flipped study halls; this kind of learning climate can expand the learning capability of the understudies. Understudies can learn whenever and anyplace, in this manner growing new aptitudes in the process prompting deep rooted learning. The public authority additionally perceives the expanding significance of internet learning in this powerful world (UNESCO, 2020).

Issue on Global and Education

Covid-19 is the most recent issue of 2020 to be talked about and tended to across areas, following the World Health Organization (WHO), on January 31, 2020, announcing Covid a worldwide wellbeing critical (Bernama, 2020). Accordingly, WHO has again announced the COVID-19 as a worldwide pandemic subsequent to thinking about a huge expansion in cases other than China on March 12, 2020 (Bernama, 2020). After a day, the World Health Organization (WHO) on March 13, 2020, said Europe was the focal point of a worldwide Covid episode that was entering a pandemic stage and cautioned that it was difficult to anticipate when the flare-up would be basic. As per Head of WHO Tedros Adhanom Ghebreyesus (Bernama, 2020). Europe is presently announcing a larger number of cases and passing than

any blend of cases the world over, other than China. A flare-up that spreads rapidly requires prompt activity. Notwithstanding, the issue in New York, which is viewed as red zone since it has the biggest measure of populace that tainted, however because of absence of coordination, is an arrangement that ought to diminish the quantity of contaminations is flop despite the fact that the US is viewed as the country that consistently an achievement ahead in each angle. (Azmi, 2020).

Clearly, this episode influences the mending time frame. During that period it will give sway all areas, for example, legislative issues, and sports, economy, social, training and the sky is the limit from there. Undoubtedly, the effect on the economy, for example, in Malaysia that takes after a little, open nation in exchange, and has an incredible impact which is the current financial slump, yet this overwhelming impact likewise influencing all nations. Hundreds, thousands may even move toward the 1,000,000 facings through challenges with Malaysia's little and medium-sized industry (Nazmi, 2020).

The effect of Covid19 not just influences the economy of the nation; it likewise influences the issues of training including the world, the country, the family, and the person. Some 1.3 billion students around the globe couldn't go to class or college as of March 23, 2020, as indicated by the most recent figures delivered by (UNESCO, 2020). Most governments around the globe have briefly shut instructive establishments trying to contain the spread of the COVID-19 pandemic. These cross country terminations are affecting over 91% of the world's understudy populace. A few different nations have actualized confined terminations affecting large number of extra students. (UNESCO, 2020).

UNESCO's figures allude to students enlisted at pre-essential, essential, lower-auxiliary, and upper-optional degrees of instruction just as at the tertiary level. 1,379,344,914 understudies or 80% of the world's students are currently being kept out of instructive organizations by nationwide terminations (UNESCO, 2020).

In Malaysia, particularly government schools, about 4.7 million essential and auxiliary school stop their activity for a month because of the development control request (MCO) expansion until 28 April 2020, which assume to be finished on March 31 (Jason Thomas and Durie Rainer Fong, 2020). Because of the new World Education Report (UNESCO), the Ministry of Education has recommended that school meetings be continued simply after the COVID-19 is completely recuperated to keep away from another flood of flare-ups. The report by Abu Baker (2020) likewise shows that a few nations like Singapore have needed to close all school meetings after a few preliminaries to permit it to run typically.

In Malaysia, All educational program and co-curricular exercises in instruction including gathering should be cancelled to guarantee the wellbeing and social distance, everything being equal, and instructors are applied (Yusri and Amin, 2020). Additionally the conclusion, all things considered, including government and non-public schools just as every day schools, lodgings, global and tahfiz focuses. Essential, optional and pre-college instructive establishments and the end of all open and private colleges and abilities preparing foundations cross country likewise shut (Abdul, 2020). Despite the fact that the public authority's end of all school meetings, it didn't prevent the instruction cycle from proceeding. Difficulties for educators and understudies are arising to advance all the mediums accessible to direct learning meetings.

Beforehand, as stated by Remuzzi & Remuzzi (2020) web based learning was just an alternative. Nevertheless, with MCO authorization, it turned into a need. Then again, internet learning still can't seem to arrive at the degree of fulfilment for instructors and understudies. For certain instructors, this is troublesome in light of the fact that today, there are as yet

numerous educators who are absence of abilities in the utilization of data innovation to empower them to convey showing materials on the web (Anuar & Haslindar, 2020). For certain instructors, they need more planning with showing materials prior to actualizing internet learning. Already they just need to zero in on setting up the showing strategies; presently they need to expand the utilization of innovation instruments in their showing helps since educators need to show utilizing academic and online evaluation techniques.

Teaching 21st Century Skills is No more an Option, it is a Necessity

According to UNESCO IESALC (2020), the significant piece of the world is on isolate because of the genuine episode of this worldwide pandemic Covid-19 and along these lines numerous urban areas have transformed into ghost urban communities and its belongings can be found in schools, schools, and colleges as well. In between this web based educating and web based learning can be named as the panacea for the emergency.

The Corona Virus has made foundations to go from disconnected mode to online method of teaching method (Stone, 2020). This emergency will make the establishments, which were prior hesitant to change, to acknowledge present day innovation (Yusri & Amin, 2020). This disaster will show us the worthwhile side of internet instructing and learning (UNESCO, 2020). With the assistance of internet showing modes, we can lecture countless understudies whenever and in any piece of the world (Nazmi, 2020).

All organizations should scramble various choices of online educational methodologies and attempt to utilize innovation all the more appropriately (Abdul, 2020). Numerous colleges around the globe have completely digitalized their tasks understanding the critical need of this current circumstance (Anuar, 2020). Web based learning is arising very popular in online platforms. Thus, the quality improvement of web based instructing get the hang of its pivotal at this stage (Haslindar, 2020).

There was an overnight move of ordinary study halls into e-homerooms, that is, instructors have moved their whole academic way to deal with tackle new economic situations and adjust to the evolving circumstances (Dhawan, 2020). During this difficult stretch, the worry isn't about whether internet instructing learning techniques can give quality schooling, it is fairly how scholastic organizations will have the option to receive web based learning in a particularly gigantic way (Future, 2020).

Besides that, Jason & Durie (2020) stated that protection from change won't help any instructive unit across the world. They will be decided on their speed to adjust to the progressions in a particularly brief period and their capacity to keep up the quality. The standing of instructive units is on stake and under investigation. How well they carry on and how well they keep up their nature of training in the midst of this emergency shows their adjusting abilities. The move from eye to eye talks to online classes is the solitary conceivable arrangement. To be sure, scholarly foundations would not have the option to change the entirety of their school educational programs into and online asset short-term. Distance, scale, and customized instructing and learning are the three greatest difficulties for internet educating.

Imaginative arrangements by establishments can just assistance us manage this pandemic (Yusri & Amin, 2020). There is a prerequisite of a brisk move to internet learning mode; along these lines, the items by Google can be truly valuable under such hazardous circumstances; they are; Gmail, Google Forms, Calendars, G-Drive, Google Hangouts, Google Jam board and Drawings, Google Classroom, and Open Board Software which is not a Google

item, helps in chronicle gatherings as records. These apparatuses can effectively be utilized as an option for eye to eye classes (Mulyono, 2020).

Research Gap

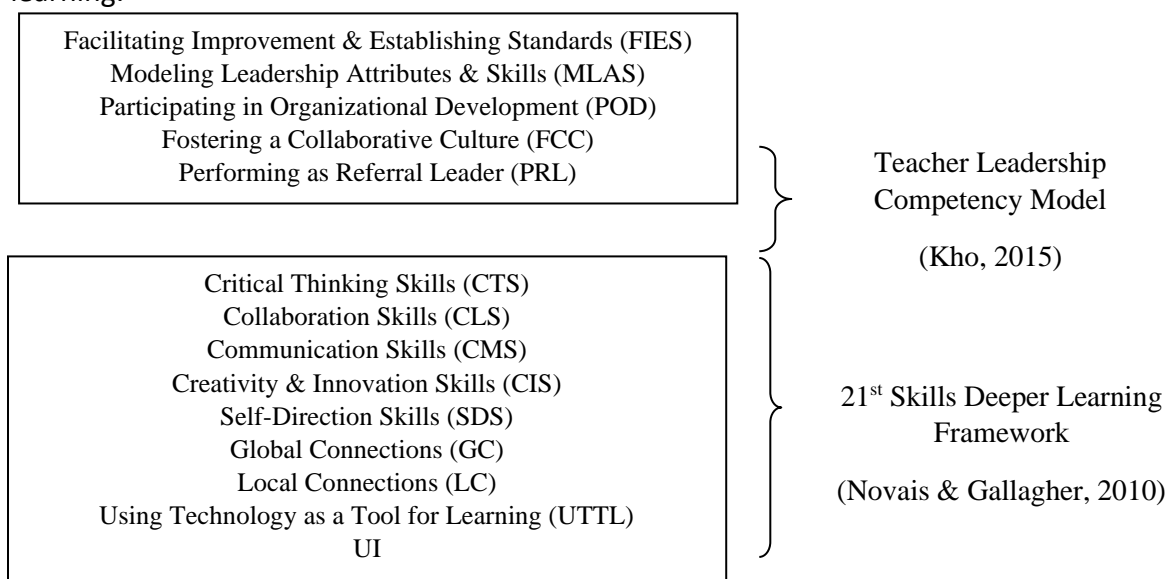
This research presents a breakthrough on the relationship of teachers’ leadership competency with 21st century teacher. According to the past related studies, two gaps were found which the leadership gap is. The first gap is 21st teachers don’t seem to be prepared with satisfactory and most recent information and abilities (Mas, Wong & Ayub, 2011). It is supported by Ministry of Finance (2014) report on the extent of Virtual Learning Environment (VLE) usage among Malaysian teachers is very low.

However the second gap is many educators till lacking the 21st century mandatory skills to be comfortable in playing leadership role (Koc & Bakir, 2010). Based on empirical studies conducted by Harin and Mohktar (2011), it was discovered that initiative practices do have some effect on instructor competency with 21st century abilities however there is still absence of observational proof to show the quality of the relationship. Thus this study was carried out to investigate the relationship of teachers’ leadership competency with 21st century teacher.

Theoretical Framework

This study was grounded in two theories by the researcher. According to Kho (2015), the Teacher Leadership Competency Model (TLCM) is the core model in the current study. The researcher will focus on these five main elements in this study through Niche-Malaysian Teachers Leadership Competence Instruments (NMTLCI) which are; i) *Facilitating Improvement and Establishing Standards*; ii) *Modeling Leadership Attributes and Skills*; iii) *Participating in Organizational Development*; iv) *Fostering a Collaborative Culture*; and v) *Performing as Referral Leader*.

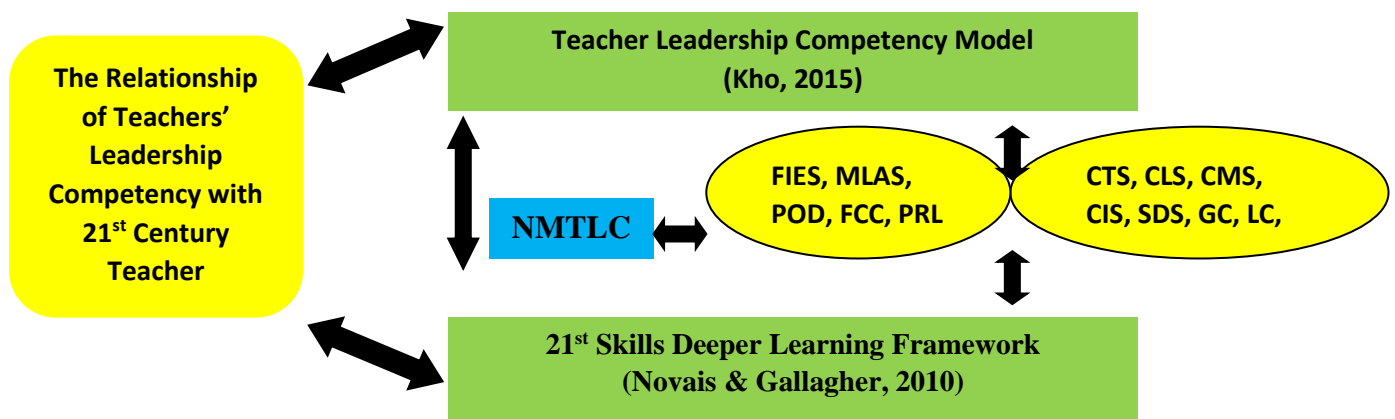
The researcher used the 21st century skills deeper learning framework which is an excellent reliability to investigate this study (Novais & Gallagher, 2010). The focus will be on critical thinking skills, collaboration skills, communication skills, creativity and innovation skills, self-direction skills, global connections, local connections and using technology as a tool for learning.



Conceptual Framework

The following represents the conceptual framework of this research in which the researcher had drawn out the flow of the links which relate to the study. This conceptual framework shows the relationship of teachers' leadership competency with 21st century teacher. There are five elements the researcher analyzed by using Niche-Malaysian Teachers Leadership Competence Instruments (NMTLCI) as stated in the theoretical framework.

However, there were eight elements of 21st century skills which were analyzed as well by using the 21st Skills Deeper Learning Framework. Based on the model and framework, the theoretical framework correlated to each other with conceptual framework in the process to investigate the relationship of teachers' leadership competency with 21st century teacher.



Research Approach

The quantitative approach was applied in this study to examine the significance relationship of teachers' leadership competency with 21st century teachers teaching skills at Kuala Kubu Bharu district secondary schools. It is a useful design in this research as the researcher was the first researcher to do this study at Kuala Kubu Bharu district secondary schools. The researcher had used survey of the quantitative approach.

Research Design

According to Creswell (2014), non-test study design encapsulates a set of techniques for conducting quantitative research in which no control is applied to any factor in the investigation. As part of the second approach, known as overview analysis, the scientist will guide engaging exploration. The focal reason for review research is to depict attributes of a gathering populace (Fraenkel, 2012). In any case, Creswell (2005) stated, "it is basically a quantitative examination method in which the scientist manages a type of review or survey to an example or, sometimes, a whole populace of people to depict their mentalities, suppositions, practices, encounters, or different qualities of the populace".

Study examination can be utilized in an expressive way, as has been clarified; however, it might likewise use to research connections between factors (Fraenkel, 2012; McMillan, 2012). According to Fraenkel (2012), the researcher may choose from a variety of knowledge collection methods when conducting analysis research, including direct arrangement of overviews, mail studies, phone studies, interviews, email studies, and online studies. As a result, the analyst will gathered information using electronic overviews, which discussed in greater detail in Chapter 4 for the discoveries section. The analysis would be tailored to the situation by sending a printed copy to each individual and requesting that they return it by mail by a certain date.

The Aim of the Study

The point of the investigation is to break down the teachers' leadership competency level of teacher leadership and the teachers' leadership competency with 21st century teachers teaching skills during COVID-19 in Kuala Kubu Bharu district secondary schools. This research aims to examine the significance relationship of teachers' leadership competency with 21st century teachers teaching skills at Kuala Kubu Bharu district secondary schools.

Participants of the Study

The researcher had select total 5 schools in Kuala Kubu Bharu district secondary schools which consists total of 10 teachers from each school to participate in this study. These 50 teachers were from various subject and position. The researcher had select 50 teachers from various subject or position because to examine the significance relationship. Probability sampling method was used in this study. Probability sampling was picked on the grounds that it relies upon the way that every person from a general population has a known and identical chance of being picked. The researcher chooses cluster random sampling type in probability sampling for this study. The reason why researcher chooses this sampling it's because the researcher felt convenient and easy of use if able to select one district of secondary schools in Kuala Kubu Bharu, Selangor and 10 teachers from each school based on the school subjects.

Survey Research Process

The researcher only used questionnaire as an instrument for this survey research. The instrument was used based for the purpose of this study. Web-based survey had to use by the researcher for collecting data during pandemic COVID-19. The researcher will be using the basic steps in conducting this quantitative research study. The processes are according to Fraenkel et al (2012)

- i. *Identification of the topic to be studies.* As with any type of research study, the topic for investigation should first be identified. The topic is often refined and narrowed during the next step.
- ii. *Review of related literature.* As you have learned, related literature is reviewed to identify useful strategies for conducting the study, as well as to see what has already been discovered about the topic of interest.
- iii. *Identification and selection of participants.* In survey research, the initial activity in the selection of participants is to identify the target population. This is the larger group of people to whom the researcher would like to generalize the results of the study. From that list of people, individuals are randomly selected for inclusion in the sample, using a probability sampling technique.
- iv. *Determination of the mode of data collection.* The researcher must determine the most appropriate method for collecting data whether it be direct administration of a survey, a mail survey, a telephone survey, interviews, email survey, or web-based surveys.
- v. *Drafting the cover letter and instrument.* A cover letter, which will accompany a written survey or precede the interview process, explains the purpose of the study and describes what will be asked of participants. In addition, this letter also describes the potential benefits of the study.

- vi. *Pilot test of the instrument.* A pilot test will be done before actual data collection occurs. It will be a trial run of the data collection process to determine if any revisions should be made. Using a small group perhaps 15 to 20 individuals selected from the population of interest, the cover letter and survey are to be distributed and completed. This process gives the researcher an idea of how long it might take individuals to complete the instrument. It also provides feedback about specific questions that may need revision prior to actual data collection.
- vii. *Collection of data.* Data are collected through the administration of the survey instrument.
- viii. *Analysis of data.* Most analyses of survey data will involve the use of statistical procedures. These analyses may involve simple frequency distributions, descriptive statistics, correlations or group comparison.
- ix. *Answering research questions and drawing conclusions.* The results of the analyses should permit the researcher to answer the guiding research questions for the study. Once this has been done, inferences about the population may be drawn and conclusions about the study stated.

The researcher chooses survey research because this instrument was the best for this study based on the study purpose. It helps the researcher to perceive unequivocal individuals or zones from which to assemble additional data. The nature of this examination research is a wonderful technique to collect loads of information from various people. It's presumably the best technique too to utilize when one would like to increase a delegate image of the perspectives and qualities of an enormous gathering. Other than that, overview research will in general be solid technique for request. In entirety, coming up next are advantages of study research are; practical, generalizable, dependable, and flexible.

Questionnaire

The researcher used questionnaire for this survey research which consists of three sections. Section A is related to demography factor. Section B consists of item which related to teacher leadership competency. Meanwhile, Section C will be more on 21st century teacher.

Data Analysis

The researcher used this research design plan and steps of analyzing quantitative data as below to conduct this study

Research Questions	Data collection	Analysis
1. What is the competency level of teacher leadership at Kuala Kubu Bharu district secondary schools?	Survey	Frequency Distributions Descriptive Statistics Correlations
2. What is the 21 st century teachers teaching skills level at Kuala Kubu Bharu district secondary schools?	Survey	Frequency Distributions Descriptive Statistics Correlations
3. Is there any significance relationship of teachers' leadership competency with 21 st	Survey	Frequency Distributions Descriptive Statistics

century teachers teaching skills at Kuala Kubu Bharu district secondary schools?		Correlations
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Bivariate Analysis

Bivariate analysis is a test that will be performed to see the correlation between variables with other variables. Apart from that this analysis can also see the influence or predict some variables with other variables. Several tests can be implemented in this study. This will be clarified in the test to be implemented.

Correlation Test

Correlation is performed to see the relationship between the dependent variable and the defensive variable. This test is also to review and to answer the hypotheses in this study as described in Chapter III. The analysis conducted was a ‘Pearson r’ correlation test because the data distribution was found to be normal to all variables. This analysis is to look at the relationship between independent surviving variable and the dependent variable. In the correlation table are displayed ‘Pearson r, ‘coefficients’, ‘significance values’ and ‘number of cases with non-missing values (N)’

In this test, the correlation values range from -1 to 1. To prove that there is a correlation relationship, the score will be marked either ‘+’ or ‘-’. Here it shows the absolute value of the correlation means that the relationship between each variable is strong. The greatest ‘diagonal’ correlation value is always 1 because each variable has a strong ‘positive linear’ value to its relationship. Whether significant or otherwise on each correlation relationship is also shown in the table below. A significant level value or ‘p’ value is likely to indicate excellent results in a relationship. The value of ‘p’ should not exceed 0.05.

According to the study of Cohen (1988), the r value can interpreted the strength of the relationship. Table 4.15 is the guideline for the strength of the relationship. The sigh of + or – indicates a positive or negative relationship.

		Leadership	21 st Century
Leadership	r	1	.524**
	Sig (.000
	N	50	50
21 st Century	r	.524**	1
	Sig (.000	
	N	50	50

The result of the study in Table 4.15 shows that all independent variables have a significant relationship with the dependent variables. The following are the results of a study that will answer the hypothesis explained earlier.

“To examine the significance relationship of teachers’ leadership competency with 21st century teachers teaching skills during Covid-19 at Kuala Kubu Bharu district secondary schools”

The results of this hypothesis clearly prove that there is a significant positive relationship between teachers’ leadership competency variables and 21st century teachers teaching skills during covid-19. The value of pearson coefficient, r is 0.524 while the value of p is 0.000, which is smaller than 0.05 (r = 0.524, p <.05). This means that there is a link between

teachers' leadership competency variables and 21st century teachers teaching skills during covid-19.

Summary

In conclusion, this chapter mainly presented the results collected from the study. Based on the data collected, the majority of the participants show that all independent variables have a significant relationship with the dependent variables. The results of this hypothesis clearly prove that there is a significant positive relationship between teachers' leadership competency variables and 21st century teachers teaching skills during covid-19. The value of pearson coefficient, r is 0.524 while the value of p is 0.000, which is smaller than 0.05 ($r = 0.524$, $p < .05$). This means that there is a link between teachers' leadership competency variables and 21st century teachers teaching skills during covid-19. In the next chapter, the findings revealed in the data analysis section will be discussed, some implications, recommendations and suggestions for further studies will be provided.

Summary of Research Question 1

What is the competency level of teacher leadership at Kuala Kubu Bharu district secondary schools?

Niche Research Grant Scheme (NMTLC) instrument is beneficial for this study in order to analyze and examine the relationship of teachers' leadership competency with 21st century teachers teaching skills during COVID-19 in Kuala Kubu Bharu district secondary schools.

Based on the analysis, the researcher found out that, there were many positive results from Education Service Officers (secondary teachers) agree with Principle 1: Facilitating Improvement and Establishing Standards; Principle 2: Modelling Leadership Attributes and Skills; Principle 3: Participating in the Organizational Development; Principle 4: Fostering a Collaborative Culture and Principle 5: Performing as Referral Leader.

Summary of Research Question 2

What is the 21st century teachers teaching skills level at Kuala Kubu Bharu district secondary schools?

Based on the Analysis the Teachers' Leadership Competency with 21st Century Teachers Teaching Skills in Kuala Kubu Bharu District Secondary Schools by using 21st Skills Deeper Learning Framework (Novais & Gallagher, 2010) showed eight (8) elements were average level. The conceptualization of skills for this instrument came from the International Innovative Teaching and Learning study.

There are eight (8) very important key tools as an educator should have and have acquired the 21st Skills which are Critical Thinking Skills, Collaboration Skills, Communication Skills, Creativity and Innovation Skills, Self-Direction Skills, Global Connections, Local Connections and Using Technology as a Tool for Learning.

Summary of Research Question 3

Is there any significance relationship of teachers' leadership competency with 21st century teachers teaching skills during Covid-19 at Kuala Kubu Bharu district secondary schools?

The result of the study in Table 4.15 shows that all independent variables have a significant relationship with the dependent variables. The results of this hypothesis clearly prove that there is a significant positive relationship between teachers' leadership competency variables and 21st century teachers teaching skills during covid-19. The value of pearson coefficient, r is 0.524 while the value of p is 0.000, which is smaller than 0.05 ($r = 0.524$, $p < .05$). This means that there is a link between teachers' leadership competency variables and 21st century teachers teaching skills during covid-19.

In conclusion, the two gaps were filled by using NMTLCI (Kho, 2015) and 21st century skills deeper learning framework (Novais & Gallagher, 2010). The first which was stated by Mas, Wong & Ayub (2011) on the 21st teachers don't seem prepared with satisfactory and most recent information and abilities. After doing research, the researcher found that the result were average. It means most of the teachers were prepared and have latest updates. However the second gaps were stated by Koc & Bakir (2010) on educators till lacking the 21st century mandatory skills to be comfortable in playing leadership role. The researcher found from the analysis data that basically majority of the 21st century teachers acquired the skills and able to apply in their teaching and learning during pandemic COVID-19.

Implication and Recommendations

The exercises, according to the instructors, helped them better understand the concepts taught in the YouTube, Zoom, and Google Meet lectures. The researcher has a range of percentage hints based on the study's findings. Even though the pandemic COVID-19 has passed, the optimistic outcome of these 21st century skills is that they should be included in the IR 4.0 approaches scheme. Teachers will be able to participate in 21st century skills at school if this is achieved, and teacher leadership competency will transcend the consequences of teaching skills. As a result, the teaching and learning process can proceed as normal, as now is the time to demonstrate how IR 4.0 can improve education.

The researcher also suggests that teachers' 21st-century skills need to be improved, especially in terms of the quality of interaction and instruction provided. In order to produce an efficient learning process during pandemic COVID-19, 21st century teachers can use digitalize aids and other teaching aids during the teaching and learning process. It will aid in attracting students' interest. According to UNESCO (2020) a diverse approach to teaching can also be used by a 21st century teacher. A 21st-century teacher should create his or her own teaching methodology, according to an eclectic approach. Visual aids can also help with the teaching-learning process. To make teaching and learning more exciting, a professional teacher leadership can use a variety of video presentations.

In addition, as stated by UNESCO IESALC (2020) teachers can develop some real-world activities to help students strengthen their education skills. Additionally, making language games is a 21st century talent. New technologies should be incorporated into the teaching and learning process by teachers. In order to improve teacher leadership competency, new creative approaches such as pictures, photos, flash cards, posters, charts, diagrams, graphs, maps, cartoons, and presentation programs should be implemented in the classroom.

However, Mulyono (2020) mentioned if teachers use E-Learning as a teaching tool during COVID-19, their leadership competency would be able to have a strong relationship with their 21st century teaching skills. E-learning is a fun way to learn, but it needs top-level management and government funding. Both of them must collaborate to recognize the value of 21st-century teacher teaching skills in a technology-based curriculum.

As a result, in order to alias IR 4.0 during the COVID-19 pandemic, teachers with 21st century teacher teaching skills must concentrate on variables such as administrative support, course material, course design, teacher characteristics, social and technical support (UNESCO IESALC, 2020).

Finally, without the various roles performed by the teachers, this research would not have been possible. More research is needed to determine the importance of teacher leadership competency in relation to 21st century teacher teaching skills during pandemics COVID-19.

Suggestions for Further Research

Additional quantitative analysis with the same or a similar sample using a different range of 21st century skills may be conducted. These findings could then be compared to those of this research. By comparing the findings, one can draw further conclusions or gain a better understanding of how 21st century skills are integrated into the institution's overall academic program.

It is proposed that qualitative analysis methods be used in addition to this report. Focus groups may be an effective way to learn why people answered the questions the way they did. Any of the observations could have been better explained with these interpretations. Similarly, a syllabus review should have been done to see how well teachers were incorporating 21st century skills into the aims and objectives of the courses being taught, as well as the tasks and projects being assigned.

In pandemic situations like COVID-19, this research requires a high degree of preparedness to changes in the environment and the ability to adapt to various distribution modes, such as remote learning or online learning. As a 21st century teacher in such dire circumstances, reliability and adequate availability of Information Communication Technology infrastructure, learning tools, and digital learning services in the form of Massive Open Online Courses, e-books, e-notes, and so on are critical.

Teachers must be well-versed in the topics they teach in order to be capable of using a variety of strategies and, if possible, adapting their techniques to improve learning. Content-based techniques and approaches for teaching specific content are included. They'll need a diverse set of teaching techniques, the ability to mix approaches, and an understanding of when and how to use specific methods and strategies. Direct, whole-group instruction, directed exploration, group work, and the facilitation of self-study and individual discovery should all be used. They should also provide input that is tailored to the person.

Aside from that, teachers must have a thorough understanding of how students learn in general, as well as their motives, feelings, and lives outside of the classroom in particular. Teachers must be able to work collaboratively with other teachers, educators, and paraprofessionals within the same organization, as well as with individuals from other organizations, professional groups, and various collaboration arrangements, such as mentoring teachers. To both maximize the use of digital tools in their teaching and use information-management systems to monitor student learning, teachers must develop strong skills in technology and the use of technology as an effective teaching tool. Teachers must have the ability to collaborate with others to help design, guide, organize, and plan learning environments. Finally, in order to benefit from their experiences, teachers must reflect on their activities.

Teacher leadership competency is a critical field of study and practice for teachers to develop and sustain school improvement (Wenner & Campbell, 2017). During COVID-19, one

of the major challenges for teacher leadership competency with 21st century teaching skills is to improve the “technical core” of professional practices, which necessitates the development of educational environments that support the creation, accumulation, and dissemination of this professional knowledge. Innovation and knowledge inspired by science on testing and evaluation, innovation inspired by companies on entrepreneurial creation of new goods and services, innovation and knowledge inspired by practitioners like teachers and school heads, and innovation inspired by users like pupils, parents, and communities are four sources that such ecosystems must draw on.

Conclusion

Based on the theoretical and conceptual framework have shown a strong connection on the relationship of teachers’ leadership competency with 21st century teacher by using Teacher Leadership Competency Model Kho (2015) and 21st Skills Deeper Learning Framework (Novais & Gallagher, 2010). There are five elements which the researcher had analyzed by using Niche-Malaysian Teachers Leadership Competence Instruments (NMTLCI) as stated in the theoretical framework.

However, there are eight elements of 21st century skills which the researcher had analyzed as well by using the 21st Skills Deeper Learning Framework. Based on the model and framework, the theoretical framework correlated to each other with conceptual framework in the process to investigate the relationship of teachers’ leadership competency with 21st century teacher and based on the data collected, the researcher has conversed on the implications and suggestions for further research based on this study. The researcher has carried out a survey towards 50 teachers from 5 different secondary schools.

Since the results were limited to only 50 participants from one district, the findings showed that position consistency has a major connection to teacher leadership competency with 21st century teaching skills during COVID-19. Education is a dynamic world, and educational reform puts more pressure on teachers to consider change. The relationship between teacher leadership competency and the curriculum, accountability, and instructional support structures in schools must represent the skills required for 21st-century success. During the pandemic COVID-19, this research study promotes more review and substantive research into the application of 21st century teacher teaching skills.

In conclusion, this research contributed the relationship of teachers’ leadership competency with 21st century teacher by using NMTLCI for Teacher Leadership Competency Model and 21st Skills Deeper Learning Framework. The results of this study clearly prove that there is a significant positive relationship between teachers’ leadership competency variables and 21st century teachers teaching skills during COVID-19.

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