

A STUDY TO EXPLORE THE PERCEPTIONS OF MULTILITERATE ASSIGNMENTS USING 21ST-CENTURY TECHNOLOGIES AMONG UNIVERSITY STUDENTS AND TEACHERS IN CHINA

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ABSTRACT

To become successful in the modern age, learners need to know more than just the facts; they need to know how to apply that knowledge. The introduction of the Common Core State Standards has placed an emphasis on educational methodology that aims to adequately educate students for their futures in university or careers in the secondary classroom. In this thesis, the author details research that looked at how university English instructors and students felt about using multiliterate projects to educate students 21st century abilities. The justifications, key terms, methods, findings, and conclusions of the research are all laid forth in this thesis. The goals of this study were to examine the following: the extent to which students' and instructors' perceptions of the use of 21st-century skills in multiliterate assignments reflect reality; the presence or absence of such skills in such assignments; and the consequences of students' and instructors' perceptions of the use of such skills on their understanding of course material. The purpose of this qualitative research is to examine whether educators and students perceive that multiliterate tasks promote the development of abilities necessary for success in the modern world. Teachers and students alike have shown via surveys and self-reflection that multiliterate tasks help students use the four primary 21st-century skills necessary for success in further education, the workplace, and life. Students' readiness for the world beyond university may be enhanced with the use of multiliterate tasks in English classes, according to this study.

Keywords: Multiliterate Assignments, 21st-Century, Technologies, Chinese University Students.

INTRODUCTION

There has been an effort to provide students with the knowledge and abilities needed for success in higher education and the workforce via various programmes including Common Core. To that end, they are putting an emphasis on teaching students to think critically, solve issues creatively, and communicate effectively to apply what they learn in the classroom to real-world situations. This is evident in every classroom and every level. The lexicon and skill sets needed by pupils in the twenty-first century are drastically different from those of previous decades. Both students and instructors may lack the necessary skills to effectively deal with new resources, such as computers and various modalities or genres (Shariff et al., 2020).

Researchers' method is using cutting-edge tools and procedures that make pupils reflect on how they carry out the task at hand. Students are expected to enhance their analytical, problem-solving, and critical-thinking abilities in accordance with the Common Core requirements. "The gap between the skills people learn and the skills people need is becoming more obvious, as traditional learning falls short of equipping students with the knowledge they need to thrive," says the World Economic Forum, adding that "today's job candidates must be able to collaborate, communicate and solve problems" (Soffel), implying that students need these 21st century skills even though Common Core gives them the means to develop them. According to Envision, a programme aimed at students in elementary university through college, "Hanover Research recently analysed six major educational frameworks designed to improve the development of 21st century skills." The programme notes that although each framework has a slightly different list of skills that students should develop, they all agree on four critical areas: collaboration and teamwork, creativity and imagination, critical thinking, and problem solving (Envision). Teachers need to make certain adjustments to the way they teach to meet the dual demands of preparing students for success in the subject area and providing them with chances to master the skills they need for that area. Literacy has always been valued, even if it has evolved over history, and thankfully, in this new digital age, there are more tools and possibilities for teachers and students (Irianto et al., 2020).

This is especially true in English classrooms. Teachers may access the materials their students utilise, and they are strongly encouraged to do so in the classroom while still instructing their pupils. Even though it's not their job description, educators are under pressure to stop using PowerPoint in the classroom. As a result, educators must come up with creative ways to communicate content utilising other media and modalities. One trend among educators is the shift towards a classroom model that emphasises the development of students' 21st-century abilities in a variety of contexts, with the goal of better preparing them for life beyond university. Are they really going to be able to teach these abilities in the classroom if corporations insist on their importance and standards say they should? Now that Common Core and 21st century skills have been implemented, this non-governmental organisation is telling educators what they must

cover in the classroom. At the conclusion of each semester or university year, students are assessed on these criteria, and teachers are obligated to include them into their lessons. This has been done before, but it's not good enough for an outside group to mandate it for instructors. Their focus should instead be on the why and how of implementing the standards, with a focus on the application of 21st century skills. In this study, they are investigating how both students and teachers see the benefit and utility of multiliterate activities, as well as how well these assignments encourage students to use skills appropriate to the modern world (Hunter, 2019).

BACKGROUND OF THE STUDY

Modern literacies have been the subject of a great deal of study. While some studies have broken down literacy into its component parts, others have gathered under the more general concept of new literacies, first used in the 1990s. These literacys are still novel thirty years after their introduction. In continuation of their work on multiliteracies, researchers argued that current pedagogical practices are failing to provide students with the skills necessary to understand and engage with modern technologies. In order to promote social justice and identify prejudice and authorial intent, some academics argue that students need to use new technologies to decipher text's hidden meanings (Herlambang, 2018).

Students need the aforementioned abilities if they are to participate socially, culturally, and politically in the society of the future. An umbrella phrase for the literacy skills that kids need to master to engage in today's media-rich culture is 21st-century literacies. Utiliteracies, digital literacy, and critical literacy are the three pillars upon which 21st-century literacies rest (Ramakrishnan et al., 2020).

These literacies provide educators with the tools they need to empower their pupils to take an active role in society. Modern students' social and cultural lives are integral to their literacy development the definition of literacy needs to be broadened to encompass the fact that students' communication in the 21st century is multimodal, incorporating traditional, digital, and online text types. Exposing and helping students acquire abilities to consume and produce with these new text forms and modes is crucial for them to become engaged members of society. As a result of this broader, more inclusive understanding of literacy, digital literacy become an essential skill for students to have in order to succeed in today's digital world. However, this definition also raises questions of bias, power, and viewpoints. The digital world is already a part of students' lives they need help adjusting to it so they can become thoughtful, analytical readers (Allison et al., 2018).

PURPOSE OF THE STUDY

The study's objective is to find out how instructors and students view multiliterate assignments that use contemporary technology. examining the perspectives of educators and students on the value and applicability of multiliterate tasks in the context of their education. evaluating the effects of 21st-century technology use on learning results and student engagement. Recognising any obstacles and difficulties that teachers and students might encounter when putting these assignments into practice. supplying information that can assist teachers in creating multiliterate tasks that improve instruction and student learning. investigating the ways in which Chinese culture affects how people view technology in the classroom.

LITERATURE REVIEW

A lot of people in the education and professional development sectors use the term "21st century skills" these days. "Skills for the 21st century" is a buzzword whose real power comes from the demands of modern businesses. As they compete in a worldwide market, the firms are becoming more technologically savvy. Instruction evolves in tandem with their dynamic society and its learners (Muhammad et al., 2019).

After university students face a global community that is always evolving, and teachers must do more to equip them for this reality. Rather than focusing just on imparting knowledge, educators should help students develop the abilities they need for success in post-secondary education and the workforce. Their pupils were better prepared for the challenges of the modern world if they acquire 21st century abilities in addition to the traditional academic subjects. Skills for the twenty-first century are those that teachers used with their pupils to help them think critically and creatively about what they learn in the classroom. According to the "21st Century Standards and Curriculum: Current Research and Practice" report, educational theory and practice have lately focused on getting "students ready for university and their future careers" (Adams, 2019).

To better prepare children for life in a globalised culture, researcher argues that "the core content subjects - math, social studies, the arts - must be enhanced by incorporating critical thinking, communication, collaboration, and creativity" into the classroom. The Common Core standards have been an important tool in this effort. All public schools in North Carolina, like many other states and territories in the US, are now teaching children using the newest standards, the Common Core State Standards. While additional fundamental standards are used for other core subjects, these standards primarily address math and English. There has been an effort to address the 21st century skills that students need upon graduation via the Common Core State Standards, which also require students to grasp their academic knowledge. To prepare students for university and jobs, as well as to participate in the global economy, the Common Core State Standards Initiative asserts that the standards must be strong and applicable to real life (Alafouzou et al., 2018).

Academic content with critical thinking and social skills integration has been an effort of the Common Core standards. For "students master the multi-dimensional abilities required in the 21st century," this interpretation of the criteria is helpful. The phrase "21st century skills" is not a catchphrase that may imply anything, according to researchers. Encouraging and preparing pupils with these skills set them up for success in their future jobs, whether they graduate from university. 21st century talents that may be useful in the classroom and in the real world. These skills help students learn both current and future topics. Defining and imparting the necessary abilities is sometimes more challenging for educators than the subject matter itself. Since these four abilities are most often mentioned in research and are in line with the Common Core criteria for English language arts in grades 9 and 10, they were concentrating my study on them. When it comes to preparing their students for life beyond university, every single skill is crucial. Critical thinking is defined by the National Council for Excellence in Critical Thinking as "the intellectually disciplined process of actively and skillfully conceptualising, applying, analysing, synthesising, and/or evaluating information gathered." That is to say, in order for students to think critically, they must be able to do things like analyse, interpret, evaluate, synthesise, make decisions, and solve problems. Students need to be able to think critically by analysing, evaluating, creating, and using higher-order thinking abilities (Alharbi et al., 2018).

RESEARCH QUESTIONS

1. Does the execution of multiliterate assignments have any effect on students' capacity to effectively use 21st century abilities, according to both students and teachers?
2. How can multiliterate assignments make use of abilities that are relevant in the modern world?

METHODOLOGY

The primary objective of this study was to determine how well university English teachers felt their multiliterate projects helped their students develop abilities relevant to the modern world. The goals of this study were to (1) determine whether students and instructors think that multiliterate assignments help students use 21st century skills, (2) identify which skills are present in these assignments, and (3) determine whether students' use of these skills improves their understanding of course material.

A qualitative technique was used in this investigation. Through "emerging questions and procedures, data typically collected in the environment of the participant, analysis of the data inductively constructing from particulars to general themes, and the

researcher making interpretations of the meaning of the data," qualitative approaches aim to "explore and understand the meaning individuals or groups ascribe to a social or human problem." Using a constructivist perspective, researchers conducted this investigation using a qualitative methodology. Everyone wants to know more about their everyday lives and the environment around them, according to social constructivists. One way to learn about people's worldviews is to measure their perceptions. The participants' immediate environment in this study is the classroom. To better understand how the school's instructors and students saw the incorporation of 21st century abilities into multiliterate assignments, this study set out to measure perceptions. The method employed shifted the emphasis from the incorporation of skills to the overall perceptions of the tasks by both students and instructors, as well as the extent to which the assignments served to do so. The researcher evaluated the participants' sentiments regarding their workplace and the tasks they performed by using open-ended questions. The questions were presented in a way that allowed both students and teachers to contemplate them without being rushed into coming up with a solution. This gave us a chance to learn about the participants' thoughts and feelings as well as their assumptions and biases. Ultimately, this method yielded information regarding the instructors' and students' perspectives on the tasks and the topic at hand.

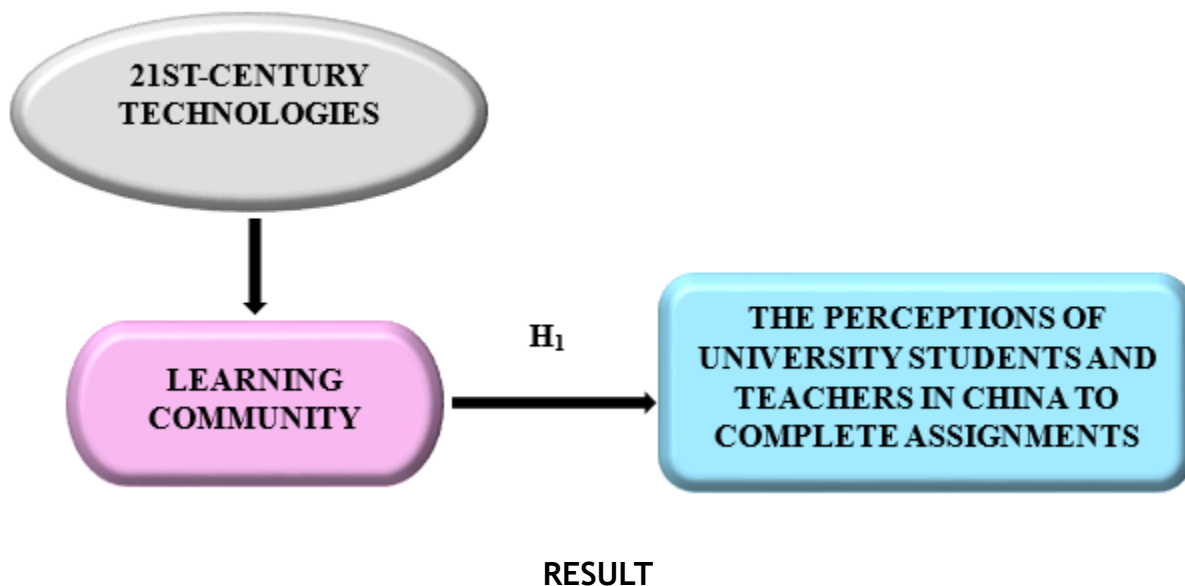
The tasks served as the basis for the development of the surveys and reflective assignments. Both multiple-choice and open-ended questions are used in the surveys. The pre-student survey included the following questions:

- What is the assignment?
- In your opinion, what abilities are necessary to do this task?
- In your opinion, which talent is crucial for this task?
- In a single phrase, what you think is the most challenging aspect of this task.
- How would you sum up the lessons you've learned from this endeavor in just a few sentences?
- Included in the post-student survey were the following questions:
- Which task have you finished?
- To do the task, what abilities were necessary?
- Which ability was crucial for finishing the task at hand?

At last, the researcher was able to get my classroom study underway. The assigned readings are discussed in class each week. The students were provided with the pre-survey via a protected Google Doc before the commencement of the assignments. The post-survey and reflection were handed out to the students after the tasks were completed. After the surveys were finished, they collected the data and ran the analyses. Using a spreadsheet, researcher extracted the survey responses from Google Doc and compared them to the pre- and post-survey results. The data was then split into two groups: one for the multigenre assignment and another for the multimodal assignment. The assignment researcher used the same procedure for analysis. To keep track of how often each ability was cited by participants for each class in ninth and

tenth grade, researcher combined the first two survey questions. In order to grade the third and fourth questions, researchers read each student's responses for recurring themes and then, if necessary, researcher gave them 21st century skills to go along with those themes. After that, researchers looked for parallels between the student's initial expectations and their final impressions of each assignment by comparing the data from the pre- and post-surveys. To analyse the data from the reflection assignment, they collected all of the paragraph responses and then split them again into the multimodal and multigenre categories. They reviewed all the assignments for recurring ideas and took note of any references to information or abilities that are relevant in the modern world.

CONCEPTUAL FRAMEWORK



Every one of my courses had a multimodal and a multigenre assignment that the students had to do. The readings they covered in class served as foundation for these summative tests. Each task had its own pre- and post-survey, and in addition to writing a reflection paragraph, students also filled out a standard academic survey. Each of these tasks was reviewed by the professors, who then completed their own questionnaires.

Neither of the multimodal tasks had been used in my classroom before now. Because they cared so much about the quality of their final output, this class pleaded with me to grant them an extra day to finish their projects so that their movies would be flawless. Their passion shone through as the researcher saw the kids become really involved with the final project. Students were filled with anxiety as they worked on

this task. Their complaints persisted throughout the whole project, and they lacked the enthusiasm shown by the ninth graders in their multimodal assignment.

Students were needed to write most of the project and make films as part of the two multimodal assignments; they also had to fill out a pre-survey. According to the pre-survey, students think all four talents are necessary to do the assignments. Figure 1 shows that the poll indicated that problem-solving and creative thinking were the two most critical talents that may be required. Coming up with ideas and making it, being comfortable working well in a group with people they don't know, and being able to appeal to the project's audience were the three main themes that ran through the survey responses when asked what the hardest part of the assignment would be.

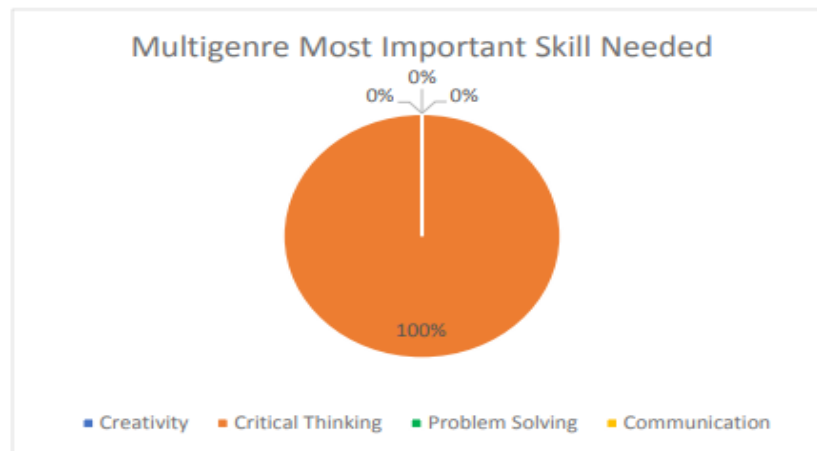
Figure 1: Multimodal most important skill needed



"The hardest part of the assignment is communicating because some people don't always feel comfortable enough about being bullied," one student said. According to another student, getting everyone in the group to agree on a single vision for the legendary hero and his trials and tribulations was described as the most challenging. One of the most important skills that students identified as necessary to finish this assignment was the ability to communicate effectively. According to one student, "having good creativity and making sure everything sums up and makes sense" is just as challenging as choosing a subject. Lastly, one student said that they found the creation of the caravan to be the most challenging aspect of this task. Along with the results from the first question indicating that students would need to communicate and be creative in order to finish the project, the students' actions reveal that they also had to utilise their creative abilities. In this question, students did not indicate that critical thinking was a

challenge. Both questions one and three demonstrate students' problem-solving abilities, which may have been necessary for them to discover innovative solutions to their projects. Participants were invited to reflect on what they want to gain from the initiative in the last survey question. Thirty-three percent of those who took part in the survey said they would have learned something new about being creative as a result of this experience. On the other hand, 33% of participants expressed confidence in their ability to work well with others in the group, and 22% were certain that the project would help them comprehend bullying, its consequences, and ways to put an end to it. Lastly, 12% of participants said that they would take away the ability to solve problems. To get the most out of their responses, students said that the multimodal assignments helped them develop 21st century abilities like creativity and communication. "Content connection" and "problem solving" were the other two options. Given the importance of creativity in the workplace, it is noteworthy that many students believed it would have a long-lasting effect. "Separating students who are prepared for a more and more complex life and work environments in the 21st century, from those who are not" is the sentiment expressed by the Partnership for 21st Century Learning (P21), which argues that this capacity for learning and innovation, along with critical thinking, communication, and collaboration, is "essential to prepare students for the future" ("Framework for 21st Century Learning"). Additionally, a small number of students held the view that the ability to effectively communicate was going to be a crucial skill for them to acquire from this assignment. Because they were working in groups, kids had to talk to one another. The students also had to figure out who they were talking to when they presented their idea. The ability to communicate effectively in the modern day is highly prized.

Figure 2: Multigenre most important skill needed



As shown in figure 2, all participants ranked critical thinking as the most crucial ability that is required to complete the assignment. Respondents listed the following as the most challenging aspect of the assignment: "judging the entire playing and its characters to write an essay on a topic that requires critical thinking," "writing,"

"reading," "journals," "understanding the feelings in the story," and "putting all of the information researchers gathered from the play into an article that resembles a news article and makes sense." Even though the whole project is based on students' interpretations of the play, many of them felt that the most challenging aspect would be coming up with the many genres to represent it. All of these ideas circle back to the need of using their imagination and reasoning skills to finish the task at hand. When asked what they thought the most important thing was to answers to the assignment ranged from "make learning critical thinking easier" to "learn how to do critical thinking better and researchers able to have more creative" ideas;" the steps to take in order to write a journal post. Researchers are able to think critically. Creativity Analysis and Debate Improving Communication for Problem Solving and "how to solve problems" Another thing they should work on is being more patient. "When I speak my mind, I should consider the impact on those around me." and "the ability to think critically that resulted from analysing the play in depth." Developing one's capacity for critical thinking was rated by most participants as the most valuable takeaway. Prior to the survey, students were informed that critical thinking included many processes such as analysis, interpretation, evaluation, synthesis, decision-making, and problem-solving. According to my understanding as both a researcher and a teacher, students are expected to read and comprehend the play to a sufficient degree to complete the assignments, as well as to comprehend the genre requirements to effectively complete the various parts of the assignment. This understanding is supported by the students' definition of critical thinking, which is provided to them.

DISCUSSION

Teachers' and students' views on the efficacy of multimodal and multigenre assignments in the classroom were captured in the surveys, but they fell short of providing comprehensive answers to the study objectives. Rather, the surveys revealed some of the abilities that were used to do the tasks. By comparing the two surveys, researchers can see that students' perceptions of the importance of 21st century skills to the project's completion changed from the pre- to post-survey. Students now clearly believe that these skills were essential to their success in completing the assignments. The students unanimously agreed that the multimodal assignments required them to use their creativity and problem-solving skills to successfully finish the projects. Participants believed they gained the most from the anti-bullying project's multimodal assignment. The questionnaires provided evidence that the projects included skill usage, even if the students didn't notice it at first. Despite students' expectations that problem-solving would play a significant role in the multimodal assignment, this ability was not mentioned in the post-survey. Students in the multimodal pre-survey failed to identify the content in their survey answers; nevertheless, in the post-surveys, they did indicate that they would retain the material. While the projects excel at putting creative, problem-solving, and critical-thinking abilities to use, the post-survey data

reveals that communication was not a top priority. Since students worked on the multigenre project alone, it's easy to see why communication wasn't given as much importance as it was in the multimodal project, where they needed to work together to finish the project successfully. So that students may make use of a broad range of abilities throughout the course, the assignments can be either multigenre or multimodal, depending on the situation.

CONCLUSION

Decisions on how to teach university subject standards should be based on assessments of students' and teachers' views of the multiliterate assignments' use of 21st century abilities. The central government and policymakers are using the Common Core standards to encourage teachers to teach pupils future-ready skills in addition to curriculum. Students prepare for college, careers, and life beyond the classroom by doing more than simply absorbing course material. Instead, the goal of the states that have embraced Common Core is to equip children with the fundamental abilities they'll need to thrive. Among these abilities are the following: the ability to think critically, solve problems, be creative, and communicate effectively. One source that has laid the groundwork to start incorporating these abilities into the classroom via activity recommendations is the Partnership for 21st Century Learning. But there are a number of methods to teach pupils the skills they'll need for university and the career. University may better equip their students for the future by adopting multiliterate books and assignments that are currently used in post-secondary institutions. These kinds of abilities are already being used at post-secondary institutions, and secondary schools may do their part to get kids ready for them by doing things like this in their classes. To help kids develop these abilities, university systems are promoting STEM (science, technology, engineering, and mathematics) and problem-based learning (PBL) activities. It is helpful to provide multiliterate assignments. Pupils have the chance to practise the abilities they'll need to succeed in the modern workforce following graduation from high school. This research has contributed to the body of evidence linking students' use of core abilities to their success in completing classroom multiliterate tasks.

REFERENCES

1. Adams, B. (2019). Teaching Multiliteracies to Chinese Students : Challenges and Insights, XX, 1-20. <https://doi.org/10.1177/2381336919870262>.
2. Alafouzou, A., Lamprinou, D., & Paraskeva, F., "Gamified Project Based Learning Environment for Motivation Improvement," In ECEL 2018 17th European

- Conference on e-Learning, pp. 10. Academic Conferences and publishing limited, November 2018.
3. Alharbi, N. M., Athauda, R. I., Chiong, R., Alharbi, N. M., Athauda, R.I., Chiong, R., ... Chiong, R. (2018). Empowering collaboration in project-based learning using a scripted environment : lessons learned from analysing instructors ' needs needs. *Technology, Pedagogy and Education*, 00(00), 1-17. <https://doi.org/10.1080/1475939X.2018.1473289>
 4. Allison, E., & Allison, E. (2018). Modern Scientific Literacy : A Case Study of Multiliteracies and Scientific Practices in a Fifth Grade Classroom, 270-283.
 5. Herlambang, Y, T,. (2018). *Pedagogik: Telaah Kritis Ilmu Pendidikan Dalam Multiperspektif*. Jakarta: Bumi Aksara.
 6. Hunter, R. H., & Jordan, R. C. (2019). The TELA: A New Tool for Assessing Educator Environmental Literacy. *Interdisciplinary Journal of Environmental and Science Education*, 15(1), e02201. <https://doi.org/10.29333/ijese/6286>
 7. Irianto, D, M., Yunansah, H,. Herlambang, Y, T,. Mulyati, T. (2020). Meningkatkan Kecerdasan Ekologis Melalui Model Multiliterasi Berbasis Ecopedagogy Approach. *Eduhumaniora: Jurnal Pendidikan Dasar*. Vol 12 (1) 81-90.
 8. M Shariff, M. N., Ahmad, N. R., & Shabbir, M. S. (2020). Moderating effect of access to finance of the gem and jewelry industry. *Utopía y Praxis Latinoamericana*, 25, 264-279. <http://doi.org/10.5281/zenodo.3809397>
 9. Muhammad, S., Shabbir, M. S., Arshad, M. A., & Mahmood, A. (2019). 4th Industrial Revolution and TVET: The Relevance of Entrepreneurship Education for Development. *Opcion*, 11-21. <https://doi.org/10.1201/9780429281501-1>
 10. Ramakrishnan, J., Shabbir, M. S., Kassim, N. M., Nguyen, P. T., & Mavaluru, D. (2020). A comprehensive and systematic review of the network virtualization techniques in the IoT. *International Journal of Communication Systems*, 33(7). <https://doi.org/10.1002/dac.4331>