NUMERACY IN THE 21ST CENTURY: BRIDGING SKILLS FOR A DIGITALLY-DRIVEN WORLD

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The twenty-first century comes into further emergence and growth, along with the widespread use of modern technologies that become an integral part of life. The rise of technology creates an important role in shaping how people learn, work, and interact with one another, which paves the way for easier tasks and opportunities for many. Furthermore, this innovation has greatly benefited not just day-to-day activities 'but perhaps more significantly, the field of education, where students are now taught and study in a more contemporary manner. Early years educators view this modern technology as a valuable learning tools and training for educators on the most effective ways to use them.

Numeracy in the twenty-first century, basic math skills evolved into a wider understanding of how to apply mathematical concepts in digitally driven world. In accordance to the study of Sakurai and Goos (2023), model of numeracy, the integration of physical, representational, and digital tools as essential components of numeracy in contemporary contexts is highlighted. For instance, the act of driving a car has a mathematical basis; the driver has awareness of the location of the destination, reads multiple instruments and indicators including speed and fuel consumption, and interprets digital maps or navigation aids. This example clearly illustrates how digital numeracy is applied in everyday activities.

The implementation of digital technologies inside the classroom has improved the numeracy skills of the students with encouraging outcomes. This statement was proved and shown in multiple studies. Based on the result of the National Numeracy Research

Briefing (2023), early experiences with math play a notable role in developing number confidence and skill from childhood through to adulthood. Encouragement to engage positively with numeracy from a young age is therefore vital in helping prevent the development of an anti-math mindset. Organizations such as the OECD and the Center for Curriculum Redesign (CCR) assert that certain learning areas are more aligned to particular 21st Century competencies than others (Bialik et al., 2015; OECD, 2019). For instance, through the learning range of mathematics, it is possible to implement pedagogies that provide opportunity for students to collaboratively utilize their strategic competence, and that mathematical reasoning skills can foster students' 21st Century skills (Bailik et al., 2015; English, 2016; Griffin, et al., 2012). This only means that numeracy in the twenty-first century allows students to apply mathematical problems and solutions in real-life scenarios.

Despite the countless advantages of the digital technologies as an instruction to the numeracy skills of the students, there are still some challenges that are clearly identified and faced by the teachers. Mumpuniarti (2017), teachers from this study reported that most students are able to count up to 10 only. They also are found to count while jumping and able to add up to 10 only. The teachers also reported that slow learner's children can use operation with reduced numbers also only up to 10; still use fingers in calculating numbers. They also found unable to count more than 10 and for operation up to 50; just have not been able to reach the standard grade number 100. Some of them are reported not knowing the numbers at all. The children also tend to using fingers to count to ten, but when more than ten using a stick. The teacher reported that a subtraction operation only until the number five, the children use image and sticks to help them in numeracy, counting more than 10 with a series of short stacks and they likely to counting the number 10 on the lines that are crossed.

Numeracy in the twenty-first century is no longer about trying to understand numbers and mathematical equations. Students must learn how to use digital

technologies to address real-life challenges in a world that is quickly changing. Because of this, the teacher's job is to teach each student to ride with the constant change, not just inside the classroom, but also learning outside, dealing with reality-based problems. For this reason, in line with Butler et al. (2022), in order for long-lasting, meaningful change to take place, educators must have a thorough understanding of what is meant by the development of mathematical numeracy and know which pedagogical strategies to employ, such as utilizing digital tools, when creating learning experiences and assessing learning. Not just implementing but exploring all the possible advantages and even the disadvantages of this modern way of teaching to ensure the proper knowledge that the students will acquire. In order to prepare students for the numeracy needs of the future, educational systems must adjust to these changes by incorporating digital technologies into numeracy courses. It can provide people the resources they need to prosper in a society driven by technology by bridging the gap between traditional numeracy abilities and digital competency.

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