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Review of Life Skills' improvement in Primary Schools' Students in Post-Corona Period

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Abstract: The main purpose of this study was investigation a framework to improve life skills for primary schools' students in post-corona period. Global school closures in response to the COVID-19 pandemic present an unprecedented risk to children's education, protection and wellbeing. While there is not enough evidence to measure the effect of school closures on the risk of disease transmission, the adverse effects of school closures on life skills and learning are well documented. Disruptions to instructional time in the classroom can have a severe impact on a students' ability to enhance life skills. For example, how long can the current remote learning approach be sustained, including learning achievements, and social-emotional wellbeing, given domestic pressure on caregivers and other context-specific factors? When select schools have been identified for reopening, six key dimensions should be used to assess their states of readiness and inform planning: policy, financing, safe operations, learning, reaching the most marginalized and wellbeing protection.

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Introduction:

The coronavirus disease 2019 (COVID-19) pandemic has had a huge effect on adolescents' health and learning. Health promotion strategies should be valued, and life skill education is a potential approach in this direction. This study aimed to investigate the implementation of an evidence-based life skill education program during the COVID-19 pandemic in the Lombardy Region (Italy) by collecting opinions about the program's usefulness and feasibility and identifying the strategies for implementing it through distance teaching. The study involved 63 middle school expert teachers, principals or coordinators in life skill education. An online questionnaire with closed- and open-ended questions was used. A qualitative content analysis was carried out using N-Vivo Answers software. The participants recognized the high value of life skill education at the time of COVID-19, but they showed reticence regarding its feasibility. Positive effects of the program on both health and learning outcomes were reported. The obstacles were related to interpersonal aspects, student involvement, methods, organization and planning. Many strategies were suggested related to the teaching method, the curriculum organization and the adaptation needs. These strategies can be used to implement active and cooperative learning at a distance to reinforce students' life skills to cope with the crisis and promote their health.

In Iran, schools were physically closed after the outbreak of the Corona virus on March, 2020, and teaching and learning in small cell phone cases continued away from the hustle and bustle of students with their classmates. Corona took education out of the ordinary, and many responsibilities fell on families without prior education, and any objections, laziness, and negligence that parents see from their personal point of view have led to punishment and even child abuse. Parents judged and educated at home according to their own tastes, and it is natural that the mother-child relationship has been severely overshadowed by this issue, and it has gotten worse and worse. Another problem with e-learning is the teacher's disconnected communication with students, and can a student who more or less listens to lessons in bed or whenever he or she wants to rely on his or her savings during the school year? The closure of schools has made children secretive, and on the other hand, the same attitude of parents towards children sometimes gives them severe stress for not answering a question, at the same time that children have to gain weight, eye injuries, inability to Learning some things after one training has been a concern for parents, psychologists and teachers.

The launch of the TV school was the first educational move after the outbreak of the Corona virus to continue teaching and learning, but due to the non-interactive nature of this type of education and the short teaching time, it could not meet the needs of students.

Therefore, Shad Network was launched in April of 2020 as the only official educational platform in the country in order to provide a safe environment for students and became a school with students.

During this time, teachers, students, and parents worked hard to keep the learning process going, teachers turned their homes into classrooms to record videos for teaching, and online classes, and parents and students worked hard to better understand the concepts. They spent more time studying science.

However, despite all these efforts, according to experts and education officials, virtual education could not replace face-to-face education, and many injuries have been inflicted on students in the fields of education, physical, emotional, social and upbringing.

Also, due to the high cost and inability to buy smart devices such as mobile phones and tablets, many students dropped out of school. Proponents of reopening schools believe that over the past two years, domestic and even international research and studies have shown that e-learning can in no way be a substitute for face-to-face education, and that one of the major challenges of the Corona has been declining student learning.

They say that students are tired of being at home, and that the negative psychological and social effects of being away from school have led to depression and isolation for many children and adolescents. However, some people are against the reopening of schools after the Nowruz holiday and have even launched a campaign against the reopening of schools.

Some parents also believe that e-learning during the corona did not meet the scientific needs of their children and their children have experienced a significant drop in education during this period, in a situation where the public is witnessing the movement of people in various places of recreation and tourism in the days.

Advocates of school reopening also say that parents cannot play the role of teacher properly, and that parents' expertise in education, as well as problems with "happy" e-learning software, have caused their children to suffer severely academically. Students' active participation in the classroom, maintaining order, expanding the scope of communication in the classroom, asking mental questions, practicing group work and learning are better than the benefits of face-to-face education.

According to the experts in in-class education, in any case, we achieve results through compulsion, but in absentee education, the student does not feel responsible. Lags behind learning.

Deep gap between students and teachers in the use of digital education, reduced student motivation, lack of group practice, reduced direct relationship between teacher and student, laziness, inactivity of students and family fatigue and frustration are some of the harms of distance learning.

The long closure has caused profound damage to the students' learning and teaching process, and it must be prevented and put an end to in some way. But this positive event should not be sacrificed with little regard for the important issue of public health.

Regarding the reaction of parents to the full reopening of schools, the Director General of Education of Mazandaran says: According to the evaluation and survey of 520,000 students and their parents in recent weeks, about 80% have welcomed the reopening of schools and the resumption of their children.

However, the Director General of Education of Mazandaran believes that the health of students is very basic for those in charge of education and school principals will certainly pay attention to the observance of health instructions and the need to use a mask.

Alireza Saadipour, stating that we have allocated funds to provide infrastructure and prepare the province's schools for the admission of students in person, added: "Virtual education, however, allows parents to take care of their children's health by not attending school." They feel more secure, but students need to be socialized, and this is provided by face-to-face education, because schools, in addition to their educational and learning activities, play a significant role in holding competitions and festivals in various religious, cultural, artistic and sports fields. Students will grow in all directions.

He added: "The decline in education and the lack of flourishing of students' talents in the months when face-to-face education was not established in Mazandaran has increased a lot and if the ambiguous trend of virtual education continued, negative long-term effects on the education community and the province.

Following this decision, the medical community has asked the educational authorities to strictly implement the health instructions in addition to creating a safe health environment to end the dual concerns of face-to-face or virtual education.

Also, the necessary infrastructure should be provided, along with the realization of desirable vaccination statistics among the target community of teachers, school staff and students, as well as the

requirement to use a mask and observe social distance between students and air circulation in the classroom.

A research about life skill improvement in foreign countries

"Soft Skills are very important. With soft skill training, the young generation can better adapt to digital learning and the demands of Industry 4.0." said Ly Bunna, Head of Provincial Office of Education, Siem Reap.

The Local Life Skills Program, supported by UNICEF since 2015, helps students from grade 4-9 to better deal with the challenges of everyday life, whether at school, home, or in their communities. The curriculum uses an Inquiry-Based Learning (IBL) approach, which allows students to learn soft skills while studying a problem and searching for a solution. While actively exploring a topic through research and interviews, they learn about themselves, become more confident, and start to apply their learnings to the world around them.

Each class starts with a real-life problem relevant to the students and their community. Topics are picked by students in collaboration with teachers, school directors, and key community members. Nop Savot, Vice Director of Aranhraingsei Lower Secondary School said, "In solving one problem, students must collaborate with many stakeholders. When they can solve small problems creatively by communicating well, they will succeed with bigger challenges in the future."

Globally there is much concern about 'lost learning' during the long stretches of out-of-classroom time, where teachers must do their best to support their students online. The active and engaged approach of IBL strengthens independent learning outside the classroom, and is even more important during these COVID-driven school closures.

"When I was a student, we only listened and wrote. Now I understand, that's not enough," said Director Pronh. "When I first attended the UNICEF training, I had never heard of soft skills. As I used what I had learned in the training to solve school problems, it built my confidence and increased my motivation."

Vice Director Savot underlined the importance of critical thinking in education, saying, "If a student can do an exercise, it doesn't mean that they understand. When they truly understand, after having researched, analyzed evidence, and synthesized ideas they can apply in real life." He advised schools just beginning the programme to "start small and add, just like students start small in the programme. One topic, one problem. Once you see these children change, you will be engaged." He also emphasized the

importance of strong support from school management in order for teachers to succeed.

Director Khan understands that although the benefits of the local life skills programme can be great, it's not easy in the beginning "Soft skills are a bit abstract. Take a quality like 'confidence'. As you observe students in Life Skills activities, you can see them become more confident' over time. When you see the change in your students, you will believe even more in the Life Skills programme."

Peer support between students is just as important for the success of the programme. In local life skills classes, students learn individual responsibility and how to work together towards a common goal. In the process of learning about themselves, students become more confident and engaged with classmates, teachers, family, and the greater community.

"The biggest progress is students valuing themselves. Positive behavior starts with themselves and extends to others. They communicate among teams, show respect, and are polite. When they have questions or need help, they will ask." said Vun Voeung, School Director of Prey Chrouk Lower Secondary School. Other school directors reflected the same thing saying that students can now bravely advocate for themselves.

Students from Aranhraingsei gladly shared that they were more confident through learning soft skills. "When I don't understand something, I ask a teacher or friend." said Koy Lisa, a Grade 9 student. "Before, I didn't want to share my opinion. Now, I speak up and communicate nicely to my friends even when I'm not happy." continued Non Sreynuch, a Grade 6 student. "I talk to people I don't know and I always greet guests or relatives. I can also manage my anger very well." said Sin Sony from Grade 8.

Mon, the mother of two students from Aranhraingsei school, described the difference she's seen in her children since they began the Local Life Skills programme, especially in the context of COVID-driven school closures: "I have observed that my girls are more polite and do housework without being asked. They manage their own schedules: learning, chores, and relaxing. Mesa is doing great at distance learning: When she doesn't understand a lesson, she tries to learn on her own. If she still does not understand, she will contact her teacher."

Teacher Bunthang highlighted the change he's seen in his students, "After experiencing the different teaching style of Local Life Skills class, many students became more engaged in their studies and even in the community. For example, when we selected 'trash' as a topic to study, my students understood the impact and started to pick up trash. It became a new habit. Even on their way in today they

picked up trash, without being asked." Further "when students pick up new habits, family and neighbors begin to follow. They become role models. Then this problem decreases in the community." said the school director of Prey Chrouk Lower Secondary School.

Students also said that Local Life Skills classes gradually made them more aware of others, and awakened an interest in helping in their communities. "Before, I was selfish and did not want to contribute. Now, I have this mindset that the school also belongs to me, not just my teachers, so I volunteer at school and in my community, like repairing damaged roads or bridges."

Although Sreynou, Peth, Mesa and other students have been able to leverage their soft skills training to keep up with their studies during school closures, online learning can be a struggle for students and teachers alike. Both schools cited around a maximum of 50 percent of students having access to smart phones for online support, with even less having consistent and reliable internet. Teachers at Aranhraingsei offer mixed online and offline support for Local Life Skills and other classes. Teachers offer Zoom classes, answer questions via Telegram messages, and encourage students to send video presentations of their research. They also provide printed interview guides to practice communication and collect information by interviewing relatives on the current Local Life Skills subject. All students and teachers expressed an eagerness to return to in-person learning as soon as it's safe to do so, saying that it's easier to learn in person.

The Inquiry-Based Learning approach that young Cambodians are learning through Local Life Skills courses can grow students into self-starters

who confidently communicate, collaborate with others, and who can learn well wherever they go. This kind of independent learning style is now more important than ever, with self-guided, distance learning becoming the new norm worldwide.

But beyond learning independently, the Life Skills Program has changed the way teachers engage with students and it is creating empathetic Cambodian citizens who bravely ask for what they need, care for others, and take initiative for the greater good of their communities.

When we support each other, everyone wins. In a time when the future is uncertain globally, we need to be stronger than ever, together.

UNICEF together with MoEYS will continue working with provinces, districts and schools to strengthen and expand the local life skills education, through school-to-school and province-to-province partnerships. UNICEF Cambodia would like to thank SIDA, SDC and the Australian Committee for UNICEF for their generous support for this programme.

Contextualization and adaptation will be critical to respond to local needs and conditions, particularly in contexts where there are multiple deprivations (such as densely populated areas, low water settings, conflict, etc.) Analysis must be done against prepandemic conditions, with an acknowledgement of both existing limitations in low-resource contexts, and current goals to improve operational and learning conditions. The response should serve as a catalyst to improve learning outcomes, increase equitable access to education and streng then the protection, health and safety of children.

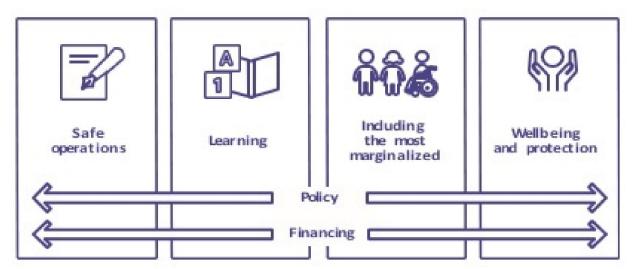


Fig. 1. A framework of principles in time of opening the schools

8 ways teachers can support students' mental health during COVID-19 school returns

As adults, we all have diverse needs and different ways of coping with stressful situations. For children, it is the same. Some children will have dealt well with restrictions and school closures caused by the COVID-19 pandemic. For others, it is challenging to cope with all the changes and uncertainty. Some children will return to school having experienced some level of stress, anxiety, isolation and grief. Some may have experienced increased violence at home. School teachers and personnel are critical in supporting children's transition back to in-person classroom learning, particularly after extended periods of school closure. In addition to continuing to use the different skills teachers have been using to ensure their students' learning and emotional wellbeing while schools were closed, the following suggestions might be helpful when schools reopen:

1. Listen to children's concerns

COVID-19 and school closures impacted many children and adolescents' mental health and well-being. As teachers, it is essential to listen to students' concerns and demonstrate understanding as well as empathy. Offer your students the opportunity to have a one-to-one conversation with you to reconnect and discuss any concerns that might have arisen when their school was closed. If a child shares anything that is particularly concerning, please follow the protection or child safeguarding systems in place.

2. Check how children are doing

Before teaching new academic content to students, teachers and school personnel should take time to check how children are doing. Remember that children may have difficulty concentrating at first or may need more time to get back into the routine of learning. Provide opportunities for children to take breaks, move around, and re-connect with their friends and peers.

3. Provide children with accurate information around COVID-19

As children return to school, they may have different thoughts and questions about COVID-19. Children want and need factual information. Use child-friendly and age-appropriate resources available in your country/region that is based on scientific evidence to respond to children's questions about COVID-19 accurately.

While it is important to acknowledge the scale of what is happening globally, make sure to emphasize all the efforts made and precautions taken to reduce risks in the school reopening plans. Do not forget to remind children of school safety protocols,

including what to do in case there is a COVID-19 case detected in the classroom.

4. Seek suggestions from children on how to create a welcoming, safe and comfortable classroom

Engage children in making the classroom a welcoming, safe and comfortable space. When doing so, make sure to respect school safety procedures and use available material resources. Children can provide suggestions; help decorate the walls of the classroom with colourful and welcoming messages and work in small groups so they can support each other to catch up on learning. Let them know that being supportive of each other will help them get through this together. Remember to praise children for their contributions and efforts. Teachers can foster feelings of safety and security by interacting and developing positive relationships with each student and using routines during the day to help children feel safe and secure.

5. Watch out for any warning signs of child behaviour that interferes with their ability to explore, play and learn

Be attentive to changes in children's behaviours. If you notice significant changes in a student's behaviour and this persists over time, preventing them from functioning or playing, please follow school protocol, and/ or seek additional support and guidance. Teachers can provide lots of support if they feel a child is struggling. However, you should seek additional support and refer children to child protection services, primary care physicians, or mental health professionals if you feel the child needs specialist help.

Continue providing learning support, as well as guidance, and provide extra support or go at a slower pace if a child is finding it difficult to learn or concentrate.

6. Encourage play and sports to promote interaction between students

In many countries' children have been following strict physical distance measures and have been prevented from using playgrounds and other public spaces to play and interact with their peers. Make sure that when children return to school that they have lots of opportunities to socialize, play and interact with the peers they have missed for so long, in line with school safety protocols.

7. Model good coping behaviours for students – be calm, honest, and caring

Teachers can be positive role models for their students. Children will look at you and learn from the skills you use daily to deal with stressful situations. Be calm, honest, and caring, and demonstrate a positive attitude to children.

8. Take care of yourself and know your limits

Teaching can be an extremely stressful profession, particularly now. Make sure to protect your own physical and mental health (e.g. maintain healthy eating and sleeping habits, rest, exercise, connect with friends, family, and colleagues). Remember to seek support if you notice yourself experiencing significant feelings of distress.

7 Skills You Need to Master to Succeed in a Post-Covid World

The post-pandemic world is not too far, and hopefully, things will get better soon. Want to know about the skills that will get you through in the post-pandemic world? Read through this blog to develop the skills required to succeed in a post-covid world.

Did you ever think about how the world will be after the virus is eradicated completely?

It sure seems much brighter and happier. Along with the changes that the post covid world brings, you need to bring about significant changes that will contribute to a better society and world. The pandemic altered the way businesses and corporations work to various extents. It is certain that things will almost take a different outlook in the future. Whether you are going to pursue a career in the corporate world, pursue a masters abroad or any other ambitious leap you intend to take.

1. Technical and Digital Skills

The post-pandemic world is not going to beg to differ as people will largely depend on online platforms for any need. And there will surely be a great demand for technical and digital skills and everyone needs to develop them irrespective of the domain they are employed in. These are important skills required to succeed in a post-corvid world.

2. Communication and Social Skills

In a Deloitte Access Economics report, it was suggested that by 2020 almost two-thirds of the jobs would be made up predominantly of soft-skills intensive occupations. This rightly shows that developing soft skills is pivotal.

One of the most important soft skills required to succeed in a post-covid world is communication and social skills. The pandemic has proved that anyone from any part of the world can connect and communicate with one another without the need to be present physically. However, to convey your ideas and thoughts, you need an exemplary communication and social skillset, and it is advisable to develop it. Social skills and socializing will open doors and opportunities in unexpected places, and it is best to work on it to thrive in the post-covid world.

3. Leadership and Management Skills

Management and leadership skills are important skills required to succeed in a post- covid world.

According to Forbes, the pandemic has given rise to the gig economy, and the gig economy will continue to flourish in the post-covid world as well. To thrive in the economy, one needs effective organization and management skills.

Whether you are going to take up a managerial position or not, leadership skill is a very important skill set that you need to develop, and it will come in handy any time. Leadership skills will help you relate with others better and convey your ideas and concepts the right way. You can start with volunteering in small community activities to develop your leadership skills.

4. Adaptability and Flexibility

In a world full of constant changes, it is only wise to be adaptable and flexible. The pandemic is a right example of the uncertainty of things and how things could change in the blink of an eye. With the change in the industry trends and marketplace, you need to adapt to the changes required to do well in the industry. Being flexible will enhance your ability to do things in a new and better way. This will help you develop a plethora of contributory skill sets.

Businesses and corporations need people who are open to changes and innovations and to thrive in today's markets, and these are important skills to develop. For a lot of people, rigidity is innate and developing adaptability and flexibility can be hard. They can develop these skill sets by taking up soft skill training as these are essential skills required to succeed in a post-covid world.

5. Finance Management

Finance management is an essential skill set to be developed and especially the important skills required to succeed in a post-covid world. Where matters of money are involved, there needs to be better planning and organization. Familiarize yourself with common terms used in finance, learn about basic investment skills, profits and management, budget plan and much more. This will help you generate a better return on investment, make wise investment decisions and run better. Individuals with a sound knowledge of finance management contribute to a better society.

6. Critical Thinking and Creative Problem Solving

People with better critical thinking skills and problem-solving skills always have a higher edge over others in the industry. The pandemic threw a lot of challenges for many industries, and to cope with it all, people needed a sound ability for problem-solving and critical thinking. The fast-paced life we have developed and the accessibility of the internet by all have led to an overload of information. To assess the information and look for its credibility, we need critical thinkers. Problem solvers and critical thinkers are not born, they are groomed, and this is

one of the skills required to succeed in a post-covid world.

7. Learning, Unlearning, And Relearning

To be succeed in the post covid world or anytime, you need to understand that learning is a never-ending process. With the changing times and evolution of the industry and its demands, it is necessary to keep yourself updated with the emerging trends and happenings in the industry you work in. This also comes with unlearning certain skills or traits that hold no good for the changing times. The urge to learn is one of the essential skills sets that you need to develop and is one of the essential skills required to succeed in a post-covid world.

The world post covid might not be the same, but the world post covid will definitely be a much better place. The pandemic did cause a lot of hardship, and one of the essential traits that we need to survive through is resilience. If you are someone who has graduated through or is trying to graduate through during the covid time, then you would know what resilience is. The ability to bounce back from hard times and do better. Make sure that you develop the above skills to survive and thrive in the post covid. Hope the above gave you an idea about the skills required to succeed in a post covid world. Are there any other skills that you think are essential?

Conclusion:

The COVID-19 pandemic has resulted in at least one positive thing: a much greater appreciation for the importance of public schools. As parents struggle to work with their children at home due to school closures, public recognition of the essential caretaking role schools play in society has skyrocketed. As young people struggle to learn from home, parents' gratitude for teachers, their skills, and their invaluable role in student well-being, has risen. As communities struggle to take care of their vulnerable children and youth, decisionmakers are having to devise new mechanisms for delivering essential services from food to education to health care. The coronavirus disease (COVID-19) pandemic has upended family life around the world. School closures, working remotely, physical distancing it's a lot to navigate for parents to navigate. Robert Jenkins, UNICEF's Global Chief of Education, offers five tips to help keep children's education on track while they're staying home. Although establishing a routine and structure is critically important for children and young people, in these times you may notice your children need some level of flexibility. Switch up your activities. If your child is seeming restless and agitated when you're trying to follow an online learning program with them, flip to a more active option. Encourage your children to ask

questions and express their feelings with you. Remember that your child may have different reactions to stress, so be patient and understanding. Start by inviting your child to talk about the issue. Find out how much they already know and follow their lead. Discuss good hygiene practices. You can use everyday moments to reinforce the importance of things like regular and thorough handwashing. Make sure you are in a safe environment and allow your child to talk freely. Drawing, stories and other activities may help to open a discussion. Finally, find out how to stay in touch with your children's teacher or school to stay informed, ask questions and get more guidance. Parent groups or community groups can also be a good way to support each other with your home schooling.

References:

- [1]. Barber, M., Donnelly, K., & Rizvi, S. (2022). Oceans of Innovation: The Atlantic, The Pacific, Global Leadership and the Future of Education. Retrieved from London: https://www.ippr.org/publications/ocean s-of-innovation-the-atlantic-the-pacific-global-leadership-and-the-future-of-education
- [2]. Basham, J. D., Hall, T. E., Carter, R. A., Jr., & Stahl, W. M. (2021). An operationalized understanding of personalized learning. *Journal of Special Education Technology*, 31(3), 126–136.
- [3]. Bishop, J. L., & Verleger, M. A. (2022). *The flipped classroom: A survey of the research*. Atlanta, GA: Paper presented at the ASEE national conference proceedings.
- [4]. Bonawitza, E., Shaftob, P., Gweonc, H., Goodmand, N. D., Spelkee, E., & Schulzc, L. (2021). The doubleedged sword of pedagogy: Instruction limits spontaneous exploration and discovery. *Cognition*, 120(3), 322–330.
- [5]. Buchsbauma, D., Gopnika, A., Griffithsa, T. L., & Shaftob, P. (2019). Children's imitation of causal action sequences is influenced by statistical and pedagogical evidence. *Cognition*, 120(3), 331–340.
- [6]. Darby, F. (2020, April 14). 5 Low-Tech, Time-Saving Ways to Teach Online During Covid-19. *Chronicle of Higher Education*. Retrieved from https://www.chronicle.com/article/5-Low-Tech-Time-Saving-Ways/248519
- [7]. Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020, June 1, 2020). COVID-19 and student learning in the United States:

- The hurt could last a lifetime. *McKinsey*. Retrieved from https://www.mckin.sey.com/indus tries/publi c-and-socia l-sector/our-insig hts/covid -19-and-stude nt-learn ing-in-the-unite d-state s-the-hurt-could last-a-lifet ime
- [8]. Duckworth, A. L., & Yeager, D. S. (2019). Measurement Matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher*, 44(4), 237–251.
- [9]. Florida, R. (2012). *The Rise of the Creative Class: Revisited* (2nd ed.). New York: Basic Books.
- [10]. Kallick, B., & Zmuda, A. (2017). Students at the center: Personalized learning with habits of mind. Alexandria, VA: ASCD.
- [11]. Kallio, J. M., & Halverson, R. (2020). Distributed leadership for personalized learning. *Journal of Research on Technology in Education*, *52*(3), 371–390.
- [12]. Kamanetz, A. (2020, March 19). 'Panicgogy': Teaching Online Classes During The Coronavirus Pandemic. *NPR*. Retrieved from https://www.npr.org/2020/03/19/81788
 5991/panic -gogy-teach ing-onlin e-class esdurin g-the-coron aviru s-pande mic
- [13]. Kapur, M. (2020). Productive failure in learning math. *Cognitive Science*, 38(5), 1008–1022.
- [14]. Kapur, M. (2019). Examining productive failure, productive success, unproductive failure, and unproductive success in learning. *Educational Psychologist*, 51(2), 289–299.
- [15]. Means, B., Toyama, Y., Murphy, R., & Baki, M. (2018). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record*, 115(3), 1–47.
- [16]. Muro, M., Whiton, J., & Maxim, R. (2019). What jobs are affected by AI? Better-paid, better-educated workers face the most exposure. Retrieved from Washington DC: https://www.brookings.edu/research/whatjobs-are-affected-by-ai-better-paid-better-educated-workers-face-the-most-exposure/
- [17]. Pane, J. F., Steiner, E. D., Baird, M. D., & Hamilton, L. S. (2015). *Continued Progress: Promising Evidence on Personalized Learning*. Santa Monica, CA: Rand Corporation.

- [18]. Pink, D. H. (2006). A Whole New Mind: Why Right-brainers Will Rule the Future. New York: Riverhead.
- [19]. Rudestam, K. E., & Schoenholtz-Read, J. (2020). *Handbook of online learning* (2nd ed.). Thousand Oaks, Calif: SAGE Publications.
- [20]. Sun, L., Tang, Y., & Zuo, W. (2020). Coronavirus pushes education online. *Nature Materials*, *19*(6), 687–687. https://doi.org/10.1038/s4156 3-020-0678-8.
- [21]. Tomlinson, C. A. (2018). Differentiated classroom: Responding to the needs of all learners. Alexandria, VA: ASCD.
- [22]. Tucker, C. R. (2020). Balance With Blended Learning: Partner With Your Students to Reimagine Learning and Reclaim Your Life. Thousand Oaks, CA: Corwin.
- [23]. UNICEF. (2020, August 24). 'What will a return to school during the COVID-19 pandemic look like?'. *UNICEF*. Retrieved from https://www.unicef.org/coron avirus/what-will-return-school-during-covid-19pandemic-look
- [24]. United Nations. (2020, August). Policy Brief: Education during COVID-19 and beyond. *United Nations*. Retrieved from https://www.un.org/devel opment/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19 and education august 2020.pdf
- [25]. Wagner, T. (2019). The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills Our Children Need-And What We Can Do About It. New York: Basic Books.
- [26]. Wagner, T. (2022). Creating Innovators: The Making of Young People Who Will Change the World. New York: Scribner.
- [27]. Wagner, T., & Dintersmith, T. (2019). Most Likely to Succeed: Preparing Our Kids for the Innovation Era. New York: Scribner.
- [28]. Wehmeyer, M., & Zhao, Y. (2020). Teaching Students to Become Self-Determined Learners. Alexandria, VA:
- [29]. ASCD.
- [30]. Zhao, Y. (2021). Students as change partners: A proposal for educational change in the age of globalization.
- [31]. Journal of Educational Change, 12(2), 267–279. https://doi.org/10.1007/s1083-3-011-9159-9.
- [32]. Zhao, Y. (2022). Flunking innovation and creativity. *Phi Delta Kappan*, 94(1), 56–61.

- [33]. Zhao, Y. (2022b). World Class Learners: Educating Creative and Entrepreneurial Students. Thousand Oaks, CA: Corwin.
- [34]. Zhao, Y. (2018a). The Changing Context of Teaching and Implications for Teacher Education. *Peabody*
- [35]. Journal of Education, 93, 295–308.
- [36]. Zhao, Y. (2018b). Personalizable Education for Greatness. *Kappa Delta Pi Record*, 54(3), 109–115.
- [37]. Zhao, Y. (2018c). Reach for Greatness: Personalizable Education for All Children. Thousand Oaks, CA: Corwin.
- [38]. Zhao, Y. (2018d). What Works May Hurt: Side Effects in Education. New York: Teachers College Press.
- [39]. Zhao, Y. (2020). Tofu Is Not Cheese: Rethinking Education Amid the COVID-19 Pandemic. *ECNU Review of Education*, 3(2),

- 189–203. https://doi.org/10.1177/20965 31120 92808 2.
- [40]. Zhao, Y., Lei, J., Yan, B., Lai, C., & Tan, S. (2015). What Makes the Difference: A practical analysis of research on the effectiveness of distance education. *Teachers College Record*, 107(8), 1836–1884.
- [41]. Zhao, Y., & Tavangar, H. S. (2019). World class learners: personalized education for autonomous learning and student-driven curriculum. Thousand Oaks, California: Corwin.
- [42]. Zhao, Y., Wehmeyer, M., Basham, J., & Hansen, D. (2019). Tackling the wicked problem of measuring what matters: framing the questions. *ECNU Review Education*, 2(3), 262–278

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