New Context, New Teachers, and New Teacher Education

YONG ZHAO

University of Kansas, USA University of Melbourne, Australia yongzhaoeducation@gmail.com

This article discusses the changing context of education brought about by technology and the COVID pandemic and its implications for teachers and teacher education. Specifically, the article argues that technological changes have made instruction much less important for teachers because online learning resources and knowledge experts have increased tremendously and are globally available. Learning is no longer limited to the classroom or teachers. In this new context, teachers need to shift from instruction to coaching and recourse curating. Teacher education should thus shift from teaching future teachers how to teach and what to teach to helping future teachers become human educators who support the growth of individual students.

INTRODUCTION

A few years ago, I wrote about the changing context of education and its demand for new teachers (Zhao, 2018a, 2018c). I wrote about how technology has come to redefine the learning context and how it enables students to become their own learners. I wrote about how teachers need to change their work from instruction to support learning. The role of the teacher is no longer an instructional machine, but a talent coach, a resource curator, a project manager, and a community organizer.

The COVID-19 pandemic since 2020 has drastically changed the world we live in. With millions of lives lost, billions of students and teachers shut

128 Zhao

out of schools (United Nations, 2020), and global supply chain disrupted, the pandemic has created a different context of living and education. A lot more work has been moved online and a lot more people are working from home.

Today, two and half years after the start of the pandemic, all students have in some way been affected by the pandemic. They have experienced learning remotely and uncertainly. They have experienced isolation physically but broader connections online. They have realized that learning can happen without being physically together with teachers and classmates (Zhao, 2021a).

Teachers have demonstrated incredible resilience and willingness to innovate. They quickly, without much preparation, adapted to the changing situation caused by COVID. They started teaching online, using technology, finding resources, and coming up with new ways of teaching. They adjusted the curriculum, changed pedagogy, and invented new ways of staying in touch with students and parents (Watterston & Zhao, 2021; Zhao & Watterston, 2021).

Schools, too, have been forced to operate differently. Not only did they have to switch between remote and in-person learning in accordance with the situation of the pandemic, they had to develop new forms of learning, new ways of managing teachers and students, and new approaches to curriculum and assessment. Schools also had to rearrange scheduling, facilities, and technological equipment (Zhao, 2020).

In response to the pandemic, many higher education institutions decided not to require standardized test scores such as the SAT and ACT for admissions. Test organizations have also suspended or could not offer as many sessions. Educational systems have also suspended their annual standardized testing. Their efforts have been directed to ensure that the system exists for all students (Zhao, 2020).

Overall, the pandemic resulted in a global disruptive experience for all involved in education. This disruption has exposed everyone in education to possibilities that may have been advocated by some but never realized for all. The disruption allowed everyone in education to see education differently. Although all schools are forced to return to normal, to the education that everyone had, it would be shameful to lose what COVID gave us in education.

What COVID gave us in education is the expansion of possibilities. It gave all of us the opportunity to examine what education is and what it can be. Regardless of our perspectives, the examination of education during COVID seems to at least reaffirm that the context of education is changing and these changes require adaptations in teachers and teacher education.

VISION: THE CHANGING CONTEXT OF EDUCATION

There was much discussion about the changing context of education prior to the pandemic. There were calls for changing what should be taught and assessed, how teaching should be changed, and how students should be treated (for example, see Barber et al., 2012; Duckworth & Yeager, 2015; Wagner, 2012; Zhao, 2009, 2012). The pandemic and recent technological changes have made the changing context more real to a lot more people. Below are some of the primary forces that shape the new education context.

Reforms have not worked. Many countries have undertaken drastic reform efforts over the past few decades, but the overall results are disappointing. In the United States, for example, despite serious efforts to change curriculum or curriculum standards, teachers and teaching, and assessment, education has not been made much better. The National Assessment of Education Progress or NAEP, for instance, has not seen dramatic improvement in reading and math for 50 years. The achievement gap between advantaged and disadvantaged students has not narrowed either (National Assessment of Educational Progress, 2021). International assessments such as the Programme for International Student Assessment or PISA also show a lack of progress since its inception in 2000.

Learning has escaped schools. About ten years ago, the late Harvard professor Richard Elmore said at a conference that learning has left the school system. If anyone wants to learn anything, they can do so without going into a school. What schools retain is their power to credential people. Today, after COVID-19, technology-based learning resources have been significantly increased. Online courses, learning materials, schools, and experts are readily available to virtually any student who has access to a smart phone, pad, or computer (Zhao, 2021b). As a result, teachers or schools are no longer the controller of learning materials or experiences. Students can and do learn from other places (Aragon et al., 2019; Elmore, 2016).

There is more understanding and recognition that students are diverse, purposeful, and natural born learners (Beard, 2018; National Academies of Sciences & Medicine, 2018; Zhao, 2018b). Students come from different backgrounds, have different strengths and interests, and are intentional individuals who desire autonomy, mastery, and relationships (Ryan & Deci, 2017; Wehmeyer & Zhao, 2020). They are not passive recipients of a homogenous curriculum. Instead, they are active learners who wish to create value for others.

There is increasing need for students to develop skills and competences in order to thrive in an uncertain world (McDiarmid & Zhao, 2022). The

130 Zhao

rapidly advancing technology will undoubtedly change the world for better and for worse. The evolving landscape of geopolitical conflicts and collaborations is reshaping the global economy and human lives. The future of climate change, environmental degradation, and infectious diseases pose tremendous threat to human society. But education continues to focus on imposing a homogenous, knowledge-based curriculum on all children when they need to be uniquely great, self-determined, and new competencies to deal with uncertainties, to manage possibilities, and to create a more prosperous and peaceful world (Watterston & Zhao, 2020; Zhao, 2012, 2021b; Zhao & Watterston, 2021).

IMPLEMENTATION: NEW TEACHERS AND NEW TEACHER EDUCATION

As the context of education changes, the role of teachers also change. The primary job of teachers has been instruction, that is, to explain and pass on predetermined knowledge in the curriculum to students. The second job for teachers has been managing and disciplining students. Both jobs are unnecessary in the new context. First, as remote learning during COVID has suggested, students can learn online. With so many online learning resources and opportunities, which may actually be more engaging than individual teachers can create, there is no need for teachers to instruct. Second, when students are provided opportunities to engage in self-determined learning, they are intrinsically motivated, with goals and purposes in mind. They are the owners of their own learning. They do not need to be managed or disciplined.

When teachers are freed from mechanical instruction or disciplinary management, they have more important jobs to do. First, they need to guide students to what is worth learning. The most important job for a teacher is serving as a talent coach for each and every student. The teacher needs to work with students to understand their strengths and passions and identify opportunities to develop those strengths and passions. The teacher would also work with students to explore opportunities to translate their strengths and passions into solutions to problems worth solving in the world. Second, a teacher needs to become a community organizer. When students learn to solve problems, they typically work in communities of learning. The community can be local or global. The teacher's job is then to organize the community locally and globally. Third, a teacher should be a project manager to help students go through the process of identifying problems, coming up with solutions, developing products, and improving products through feed-

back and continuous improvement. A teacher should also help students to go through the social and emotional process of problem solving. Fourth, a teacher is a resource curator. In order to support student learning, a teacher needs to find and curate resources necessary for learning. Finally, the new teacher is a human educator instead of an instructional machine. Thus, the teacher also has his or her strengths and passions, which should be part of his or her professional work.

The new teacher education should move away from the traditional focus on teaching future teachers to know what they need to teach and how to teach it [Council for the Accreditation of Educator Preparation (CAEP), 2015]. The new teacher education should first acknowledge that students in the future education paradigm are active owners of their own learning and they can learn from the vast resources of learning with technology. Then it should recognize teachers as human educators whose job has fundamentally changed. To prepare teachers for the new jobs, teacher education needs to focus on at least five new domains:

- 1. Understand and support learning as strength-based and passion-driven;
- Understand and support students as active, purposeful, and diverse human agents of learning;
- 3. Understand and support learning as social and community-based;
- 4. Understand and support learning through problem-based projects; and
- 5. Understand and support learning as local and global activities.

SUMMARY

Education needs to change and is changing. It is unknown whether education will change to enable students to become autonomous owners of their own learning and take advantage of the widely available learning resources and opportunities made possible by technology. But it is certain that the current paradigm of education is unable to prepare our children to create a better future. How can education change largely depends on teachers in our schools. Can we prepare teachers to teach in the new context of education?

References

Aragon, C. R., Davis, K., & Fiesler, C. (2019). Writers in the secret garden: Fanfiction, youth, and new forms of mentoring. The MIT Press.

132 Zhao

Barber, M., Donnelly, K., & Rizvi, S. (2012). *Oceans of innovation: The Atlantic, the Pacific, global leadership and the future of education.* https://www.ippr.org/publications/oceans-of-innovation-the-atlantic-the-pacific-global-leadership-and-the-future-of-education

- Beard, A. (2018). Natural born learners: Our incredible capacity to learn and how we can harness it. Hachette UK.
- Council for the Accreditation of Educator Preparation (CAEP). (2015). *CAEP accreditation standards*. CAEP.
- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher*, 44(4), 237–251.
- Elmore, R. (2016, Jan 18). Reflections on the role of Tutoria in the future of learning. https://redesdetutoria.com/download/69/articulos/11392/reflections-on-role-of-tutoria.pdf
- McDiarmid, G. W., & Zhao, Y. (2022). Learning for uncertainty: Teaching students how to thrive in a rapidly evolving world. Routledge.
- National Academies of Sciences, Engineering, & Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. The National Academies Press.
- National Assessment of Educational Progress. (2021). Explore NAEP long-term trends in Reading and Mathematics. https://www.nationsreportcard.gov/ltt/?age=9
- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Publications.
- United Nations. (2020, August). Policy brief: Education during COVID-19 and beyond. *United Nations*. https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf
- Wagner, T. (2012). Creating innovators: The making of young people who will change the world. Scribner.
- Watterston, J., & Zhao, Y. (2020). *A catalyst for change*. https://inventorium.com.au/wp-content/uploads/2020/09/Catalyst_for_change_2020.pdf
- Watterston, J., & Zhao, Y. (2021). Leading education equity for all: Personalisation and differentiation. *Australian Educational Leader*, 43(3), 8–14.
- Wehmeyer, M., & Zhao, Y. (2020). Teaching students to become self-determined learners. ASCD.
- Zhao, Y. (2009). Catching up or leading the way: American education in the age of globalization. ASCD.
- Zhao, Y. (2012). World class learners: Educating creative and entrepreneurial students. Corwin.
- Zhao, Y. (2018a). The changing context of teaching and implications for teacher education. *Peabody Journal of Education*, *93*(3), 295–308.
- Zhao, Y. (2018b). Reach for greatness: Personalizable education for all children. Corwin.
- Zhao, Y. (2018c). Rethinking teacher quality in the age of smart machines. In G. Hall, L. Quinn, & D. Gollnick (Eds.), *The Wiley handbook of teaching and learning* (pp. 603–618). Wiley and Sons, Inc.

- Zhao, Y. (2020). Tofu Is not cheese: Rethinking education amid the COVID-19 pandemic. *ECNU Review of Education*, *3*(2), 189–203.
- Zhao, Y. (2021a). Could the pandemic change education for the better? *Educational Leadership*, 79(1), 26–31.
- Zhao, Y. (2021b). Learners without borders: New learning pathways for all students. Corwin.
- Zhao, Y., & Watterston, J. (2021). The changes we need: Education post COVID-19. *Journal of Educational Change*, 22(1), 3–12. https://doi.org/10.1007/s10833-021-09417-3