The Science-Fictional in China's Online Learning Initiatives

Margaret A. Fisher

University of California, Santa Barbara / USA

I began work for DaDaABC, the Chinese company for which I teach English online, in the spring of 2018. At the time, I was living abroad in Seville, Spain and deeply immersed in my work as a private school teacher. Because the south of Spain still manages to remain partly removed from the full force of globalization, any accessible technology was reserved for the recording of grades and the occasional implementation of audio and video elements in the classroom. It was rarely if ever, incorporated into my lessons. But this was nothing new to me. I had previously taught in the US for a weekend STEM program that served disadvantaged middle school students, where PowerPoint projection was all we consistently had to work with, and I had myself been educated primarily in California public schools, where overhead projectors and late 90's Windows represented the higher-end of readily available tech. Even at my private university in New York City, the best we seemed to achieve in the average humanities classroom was still just a more elegant mode of PowerPoint presentation. There is much evidence to suggest that my experience is not unique, that despite being a leader in technological development, the US has proven slow to implement technology and online learning into its classrooms, both public and private ("The NCES Fast Facts"). Although its eventual implementation is no longer up for debate, we are still struggling to determine how technology ought to be incorporated to achieve the best results (Wexler).

So it was a remarkable experience to be first exposed to DaDaABC, an online video-conference style classroom with a simple, colorful interface and a preselected digital lesson book sitting squarely in the middle of the screen —ready to be taught. Nothing was lacking: there were feedback/encouragement buttons that produced cute, smiley characters and positive sounds, pens to draw and annotate the workbook, a translation box to write notes to the student in Chinese. And all the while, teacher and student were face-to-face, looking over the same page of the lesson together, intimately connected despite being thousands of miles apart. It was the kind of simple format that I had always imagined would be ideal for online teaching. I had a sense, despite not knowing how to render it into reality, that all that would be necessary to

teach English online would be a mutual internet connection, face-to-face video, and the book somehow "in-between" —hovering there in the imagined digital space on-screen. After a few months of teaching with DaDa, I found myself wondering why this was not already a highly popularized mode of learning? Even now I can only guess at why a widely successful attempt has not been made to establish similar startups or implement alike programs in the US, why the market might not prove welcoming to it, even though such programs would have undoubtedly benefited many teachers over these last few months of educational chaos. For my part, DaDaABC has proven to be a remarkably portable job. I have worked for them on multiple continents, within a variety of time zones, in a myriad of homes, apartments, and hotels, and through it all DaDa has provided me with a constant and necessary supplemental income in times of transition and unemployment. It remains a consistent and comforting option even now, at a particularly dark time for young, inexperienced, or otherwise disadvantaged laborers.

When the coronavirus struck China in the winter of 2019, weeks before it invaded Europe or made its way over to America to disrupt my world directly, my only thought was one of worry for my DaDa students. I worried about their health and expected that the disruption would make our online classes more difficult. I expected it would derail their entire academic year. But as the weeks of their stay-at-home order dragged on, I found that I had not fewer but more students, and though there was some increase in irritability and boredom depending on student age, we continued our work as normal. I soon found that this was not just true for my student's supplemental English classes with DaDa: the entire country had turned to online education almost overnight, with surprisingly stable results (Qu). As the quarantine in China continued and the rest of the world collapsed into illness and panic, I and my students continued to learn, take tests, and improve their English. Amid disaster, China's students worked on ("How Is China").

The contrast from where I sit has been striking. Over the past few months, I have watched my siblings, Northern California public high school students, struggle and fail to move into an online learning format in a manner that mirrors the majority of the US (Goldstein et al.). One cannot help but feel that the driving force behind the comparatively-seamless transition to online learning made by American colleges and universities over the past months has had more to do with the need to secure stability via the year's tuition than it has had to do with securing the continuous quality of

youth education—an administrative reality that undermines the valiant efforts of the highly commendable educators and staff I work alongside (Lieber; Ubell). When we consider the relative success of our universities alongside the general failure of our public schools during this crisis, we are faced with the likelihood that our public education system is slow to adapt because it lacks the drive to, and just as likely lacks the means. Perhaps if public schools followed a more business-like model, they might receive more attention from a country and government married as much to capitalism and consumerism as any other ideals. As it stands, until students pay, they are not our priority (Christakis).

But for all that, I do not know that the US's educational institutions at large, even many of its privately funded ones, are as of today prepared to truly divert their efforts into online learning in a way that will produce the needed results. There remains a lingering stigma, persistent questioning of the legitimacy and rigor of online education that has long-hindered its incorporation into most schools and programs (Kizilcec et al.). In the years leading up to the coronavirus crisis, we remained resistant to online education, only turning to it now when we have no choice but to do so—when the old status quo is no longer an option. Perhaps the old status quo will never fully be an option again, a possibility that throws into question our preparedness for it. China is arguably prepared. They were ready to embrace online learning inside the classroom when the need arose because they had already embraced it outside the classroom via educational startups, something we have barely begun to do in the United States. Why does a simple and relatively seamless model of online learning like DaDaABC, despite its very real accessibility in our digital age, still feel partly science-fictional? Why does China's burgeoning online education market, so basic in concept, still feel somewhat out of this world?

Possibly because China has had to delve into the realm of the pedagogically science-fictional to arrive at the mundane of it. China's online learning startups, DaDaABC, VIPKid, and others have been around since as early as 2010 and are part of a larger trend of AI-assisted learning that is currently ongoing within China's schools (Wang et al.). Such a widespread turn to AI will find no academic comparative in the United States, though some Chinese researchers profess to take guidance from (and even to lag behind) American technological institutions, MIT, in particular (Li). This is not surprising. The US, for all its innovative research, struggles to put much of it into social practice—and the American public is prone to resist AI like it

resists surveillance in a post-Snowden world. But China succeeds in the pedagogical science-fictional not only because it is able, with significantly less political resistance, to implement this innovation, but because culturally the innovation is successful. These startups would be nothing without the support of the students and parents who see the value of their technology and embrace it, and the teachers all over the world who elect to educate in this way.

So why have online learning companies like DaDaABC reached the audience they have, an estimated 296 million in China by the end of 2020 (Junjie)? There are some obvious benefits on the side of parents and students: DaDaABC and all comparable companies boast a teaching staff comprised almost entirely of native English speakers, and DaDa matches this with fun, colorful branding and prestigious courseware collaborations with National Geographic Learning, Oxford University Press, and most recently McGraw-Hill Education ("Under DaDaABC's Strategic Cooperation"). For teachers, the flexibility of the scheduling and minimal required setup is compatible with both a young, nomadic lifestyle and a hectic, working-adult/ parent schedule. The plug-in-and-teach allure of the company is reinforced by the pre-designed courseware, which ensures that no teacher is ever required to contribute or develop original curriculum on their own time. Additionally, for both teacher and student, the interface is visually pleasing, intuitive, and reliably managed—it is easy to fall into the stability and security of routine. But while the design of the system contributes much to its popularity, I believe the underlying structural emphasis of DaDaABC and alike companies is what makes China's online learning model truly innovative, even science-fictional in quality.

It appears that companies like DaDaABC primarily implement AI and other advanced technologies to minimize administrative input of emotional labor while maximizing educator output of emotional labor—in their words to "improve teaching efficiency" (Junjie). DaDaABC demands highly performative energy from its teachers. Model teachers, those held up for praise and reward, are those who inhabit a uniquely character-like persona every moment that they are "on-screen." Gesture, facial expressions, and voice tone alterations are emphasized as important in training materials and are often commented upon during the hiring process. These elements are also frequently addressed during efficiency reviews. No yawning or slumping of the shoulders is allowed (per DaDa's official teacher contracts and training materials), and all activities that might draw teacher attention away

from forming an emotional connection with the student—mobile device usage, background noise, or drinking water too frequently—are strongly discouraged or prohibited. Teaching *is* performance in this format, even more so than it is in-person, foreshadowing a future wherein the manufactured authenticity of any workplace persona might be subordinated to the performative internet persona we all naturally assume "on-camera." Better to be knowingly performative than unwittingly so, it seems, and better to be compensated for it than not.

The emotional output of teachers is monitored by AI technology which in many ways takes the place of DaDa's HR function. Person-to-person interaction does occasionally occur between administrators and teachers, but this is rare. When administrators do become involved, it is usually for large or complex issues; the day to day interactions between teacher and student are something they are exempt from unless called in for technical assistance. By relying on AI in this way, DaDa minimizes the emotional input required of its human administrators. The human aspect of the company is therefore handled in a manner that feels overwhelmingly automatic, something that often elicits complaints from the uninitiated teacher. The expectation imposed upon all teachers, clearly and repeatedly communicated by DaDa, is that they exist as narrowly as possible within the company's rules, do the job exactly as it is prescribed, with little room for the laxity or apathy that might otherwise develop over time in similarly predictable jobs. Behavior is regularly "monitored" by AI that records punctuality and student/parent feedback per lesson and in the case of a complaint or performance review, a teacher might find their class being supervised by an invisible administrator. This sounds possibly sinister— there is much in science fiction to make us fear the robotic monitoring and study of conduct to achieve improved results. But as a business model, it is an incredibly efficient and even (speaking from personal experience) motivating system. It is an impersonal way to assure a standard of employee behavior, and any error is managed and corrected with the same lack of ill-will with which one would adjust an out-of-place part in a well-oiled machine.

Such reliance on AI technology can cause a DaDa teacher to feel that their work is simply to "plug-in" to an indifferent system. It is odd to have no social expectations beyond showing up and doing the work—acting a part and then logging out— with little to no managerial interaction to speak of. It is a curiously transactional experience, and the teachers who struggle most seem to be those who either cannot

relinquish control, who feel the need to innovate or deviate from the content (which is often allowed so long as the lesson material remains the focus), or who otherwise cannot sustain the performative consistency demanded. Still, if the members of our "DaDa Teaching Fun" Facebook group are to be believed, the experience is positive for many. There is something apparently clarifying about having one's emotional output valued, even commodified, in this way, for better or worse. This clarifying organization is partly what I find so unprecedented in DaDa's online format, the "futuristic" something in its accomplishments so far. Because the work is uniform in many ways, because all material is pre-selected, the teacher-student relationship is mediated by the format in a way that demands emotional investment. There is little for the teacher to do beyond investing their full emotional energy into connecting with the student through the material, and the isolation of this task facilitates and fosters the formation of a strong emotional bond between teacher and student across the miles. It is this bond that retains teachers at DaDaABC, and the ease with which its formation flows from the company's format is noteworthy—it even models, perhaps, an alternative mode of educational being.

As I and other teachers across the US face the prospect of adapting once-in-person courses to an online format in the coming months, the need to break through some invisible barrier feels tangible. There is a mental-emotional obstacle to communicating with and feeling connected to our students online that we struggle to surmount (Sklar). There is something in the act of screen-mediated "meeting" that denies the transmission of more subdued emotional communication, making any online interface feel like an exercise in the output of emotional labor with few reciprocal benefits. Many who have recently begun the work of online education are already exhausted. Bearing this new fatigue, like the labor involved in adapting course content and format, falls solely upon the educator. This new labor, this emotional-affective uphill climb, goes—and will go—uncompensated and unaccounted for.

In my work with DaDaABC, I have found that it is more exhausting not to emote and that only through consistent engagement —constant output of emotional labor—are the connections and learning results I desire achieved. I do this willingly because this is precisely what I am paid for; I am being paid for my emotional labor at DaDaABC above any other teaching function. My expertise is, of course, a factor in my compensation, but this is a given in any teaching job. My true labor with DaDaABC is what I infuse into the existing content, what I bring to the predetermined

lesson and format. It is an obvious yet crucial idea to consider: that the creation of a learning environment and the production of its content is not the only work of a teacher—perhaps it is not even the primary work of a teacher. While it is likely not DaDaABC's intention to bring this idea to light—they seek a quality-controlled learning environment above all else—their model isolates the emotional labor of the teacher in a way that illuminates how multifaceted the act of teaching has become within our modern, increasingly complicated world.

The true science-fictional element of DaDaABC and China's online learning initiatives is, therefore, not the AI push to automation. It is not getting paid to simply "plug-in", to not think, to do nothing or very little—quite the opposite. The science-fictional element of DaDaABC is being compensated as an educator, as any employee whatsoever, for the emotional labor of the job. Any surface-level analysis of the US job market will demonstrate that we do not pay our workers in this way. The "best" jobs in the US, those offering the most prestige and reward, are often those requiring the most education. Little heed is paid to the average teacher, to those who work with and for the disabled, or to those whose jobs place them under constant psychological strain—individuals whose emotional labor is part and parcel of what makes their work both incredibly difficult and unequivocally essential. Such uncompensated labor is what I am valued for at DaDaABC. Intentional or not, DaDaABC's model isolates the reality and importance of emotional labor by the nature of its existence. In doing so, it becomes a possible model not only for US education—online or otherwise—but for labor more broadly, a model that ventures into the science-fictional territory of our collective social future.

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