

Unbound education: Curriculum no longer confined by time and space

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**Abstract:**

The pandemic broke down barriers to changing educational practice and highlighted discrepancies in how we taught and how the modern student learns. Increased learner autonomy showed us the power of self-regulated learning, while isolation showed us the importance of social learning. Embracing these elements in a post-covid era and accepting new roles as educators will allow us to create a learning environment that increases student motivation and harnesses learner interaction. The pandemic also shed light on institutional resource inequities, but the transition to online education showed us opportunities to re-imagine how programs, disciplines and institutions might collaboratively educate the future work-force. Beyond the curriculum, a new holistic approach to college admissions that left behind standardized testing produced a more diverse and qualified applicant pool for 2021. We now need to support this progress with a holistic approach to learning and assessment. While the pandemic illuminated a pathway to evidence-based approaches, equitable education and universal design, whether we take that path is now our choice.

**Key Words:** equitable education, autonomous learning, social presence, resource inequity, virtual delivery

The rapid response to COVID instantly overcame long-standing barriers to changing educational practice<sup>1</sup> and demonstrated methods to progress towards evidence-based approaches, strive for equitable education and aspire for universal design. A return to pre-pandemic delivery would be a failure to acknowledge and address the shortcomings the pandemic illuminated, including the power of autonomous and social learning and the impact of institutional inequities and application processes. We have the opportunity now to not only re-assess those elements, but to use them to accelerate progress with thoughtful, focused ambition.

### Autonomous Learning

The pandemic reminded us of the importance of learner autonomy<sup>2</sup>. Autonomous learning is a major curricular asset that goes beyond self-determination of a learning schedule<sup>3</sup> by improving intrinsic motivation<sup>4</sup>, life-long learning, motivation to pursue goals<sup>5,6</sup> and promoting academic success<sup>7</sup>. Allowing autonomy within a defined learning-scaffold can emphasize self-regulated learning<sup>5</sup> rather than content delivery<sup>8</sup>. Modern learners had already been adopting an autonomous approach e.g., attendance of medical school lectures has steadily declined without significant impact on grades, whereas mandatory attendance caused dissatisfaction and anxiety<sup>9</sup>. Appreciating, embracing and facilitating our learners' approach means finally accepting the decades-old call to adopt new roles as educators beyond being transferrers of information<sup>10,11</sup>.

### Social Learning

Forced isolation in the pandemic illustrated how students rely on social aspects of learning<sup>2</sup>. As rushed preparation for online classes focused on content rather than outcomes, we failed to generate an online social presence<sup>12</sup> and likely diminished the learning environment. While remedying this will require faculty development, realistic preparation time and placing value on instructional designers, we should be more ambitious. Online education's ability to let students of different backgrounds and disciplines learn together can amplify the benefits of social learning<sup>13</sup> in a way rarely captured in pre-pandemic education. We need to rethink social interactions to be inclusive and flexible, and no longer restrict them to educator and learner; traditional 'office hours' are already poorly attended and less effective<sup>14,15</sup>. Instead, a post-pandemic learning environment should broaden learner-learner interactions across degrees, universities, workplace and K-12 experiences. Not only will this promote a richer learning experience that goes beyond content delivery, but is an opportunity for a more collaborative, facile approach to reaching programmatic goals.

### Addressing institutional resource inequities

The pandemic highlighted significant inequities in educational resources and experiences that can be readily addressed using assets of virtual delivery. As employers expect the workforce to be more highly educated,<sup>16</sup> establishing inter-institutional relationships to pool resources would provide flexibility to generate tailored degrees for specific

workforce gaps. However, re-imagining education with each participating institution playing to its strengths and resolving educational challenges through collaboration would need to be done with caution. It was recently suggested that leading experts could deliver their topic to large audiences across numerous institutions <sup>17</sup>, but this would adversely impact the learning environment by minimizing social presence, quality feedback and savvy curricula design. In addressing inequities, we also need to allow schools to maintain their identity and recruitment, provide varied and distinguishable choices for all learners and avoid a trajectory toward a centralized, stagnant curriculum.

#### Addressing inequities in admissions

Beyond the curriculum, the pandemic impacted the college application process with two-thirds of U.S. colleges allowing applicants to choose whether or not to self-report standardized test scores (e.g. SAT scores)<sup>18</sup>. Without the SAT score, many colleges took a more holistic approach to the selection process <sup>19</sup>, providing students without the means to prepare for and take previously critical tests a chance to apply. In 2021, this contributed to more applications from a more qualified and diverse population <sup>20</sup>. Over 1400 U.S. colleges and universities will not require standardized test score for 2022 entry <sup>20</sup>. This holistic approach to selecting candidates for undergraduate, graduate and the workplace should be applauded, but will not be successful in isolation. Diverse learners require different approaches to learning and assessment, both of which can be reimagined with some bravery. Rigor in online education has been maintained through diversity of assessment such as a portfolio approach, which in turn is compatible with asynchronous, autonomous educational models and synergistic with a holistic selection process.

#### Summary

We have to acknowledge the body of educational psychology and research that provides us with ways of delivering evidence-based education to engage the skill-sets of instructional designers and think beyond our recent and past experiences and expertise. The post-pandemic era is a time to be unencumbered by tradition and embrace established educational science to construct education for outcomes vs. content and be adaptable to changing social, political and economic environments.

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