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### Reevaluating America's Education System

Education in the United States is currently structured in a way that does not maximize the abilities of students to fully grasp or retain what they are taught. Presently, most American classrooms are lecture-based. Under a lecture-based model, teachers convey information through direct instruction and students regurgitate the information they learn on various assessments. However, there are many flaws to this approach, creating a need for an adoption of a new education model more suitable for students. After a thorough analysis of the most effective means in which students process and acquire knowledge, it is evident that education is best approached through a method called experiential learning, an engaged learning process in which students learn through hands-on experience and activities. This contention will be supported by the thoughts of four experts in the field of media, Susan Horton, Jonathan Edelman, Bret Victor, and Bernard Stiegler.

Firstly, education must be examined through the four experts' perspectives on media. In her book, "Thinking Through Writing," the form of media Horton analyzes is the essay. Her analysis explains how the essay medium gives writers the ability to think beyond what they can think on their own. Because writing is an active process, her argument about the function of essays mirrors that of the experiential learning approach. Just as writing an essay involves engaging in active thought to generate new, profound ideas, experiential learning prompts students to participate actively in various activities in the pursuit of knowledge. In this regard,

unlike a passive lecture-based educational model, the active nature of the experiential learning process enables students to think beyond what they normally could. Next, in his work, “Hidden in Plain Site: Affordances of Shared Models in Team Based Design,” Edelman explores low-resolution and high-resolution engineering models. He argues that although high-resolution models are more detailed than low-resolution ones, they leave its viewers with little room for interpretation and additional thought. As a result, according to Edelman, low-resolution models should be used more in engineering because of their ability to spur diverse thought and create a launching pad for interpretation. Edelman’s reasoning can be applied to education, as the nature of lectures mirrors that of high-resolution models while the function of experiential learning parallels that of low-resolution models. Like high-resolution models, lectures provide an abundance of information to students in an easily digestible manner. However, they provide no opportunity for students to think on their own and create their own ideas. On the other hand, through experiential learning, students are encouraged to learn information themselves, which stimulates more thought, creativity, and innovation. Thirdly, throughout his “Media for Thinking the Unthinkable” lecture series, Victor advocates for media that reveals the behavior of a system at hand. In education, dissecting the essence or “behavior” of a certain academic concept or subject is pivotal. While a lecture-based educational approach only provides surface-level analysis of the subject at hand, experiential learning spurs students to put what they learn into practice, enabling them to truly understand the ins and outs of what they are studying. Lastly, Stiegler's “Making a Mouk” outlines how evolutions to media over time lead to changes in the organizations of people’s brains and their means of acquiring knowledge. This phenomenon is also present in the American education system, as each student has their own learning style. Unlike lecture-based learning, which only utilizes one learning style, the individual-based and

flexible nature of experiential learning allows students to create learning strategies that tailor to their strengths.

Moreover, an analysis of the source of new ideas, or innovation, is crucial in determining the education system America should adopt. According to Horton, innovation is derived from good essays, as they generate and then answer questions where none existed before. Horton's call for writers to adopt inquisitive and innovative ways of thinking should also be extended to students, who should have a drive to seek out new ideas. Although the rigid nature of lectures prevents students from acquiring this impulse, the open-endedness of experiential learning stimulates students to pursue inventive, creative means of obtaining knowledge. Alternatively, Edelman contends that the vague, incomplete essence of low-resolution engineering models spurs innovation by prompting its viewers to think beyond what is presented to them. The self-guided structure of experiential learning has the same effect on students, as they are forced to see past the basic facets of their academic subjects in order to fully grasp what they are studying. On the other hand, Victor claims that innovation ought to "ideate the unthinkable." Under an experiential learning model, as students develop new ideas and adjust their perspectives based on their acquired experiences, they gradually begin ideating what was previously unthinkable to them. Finally, Steigler argues that innovation is derived from the concept of pharmakon, an interweaving of remedy and poison (i.e. beneficial and harmful effects) in media, and how it has the potential to "proletariatize" one's mind, making it lose knowledge just as much as it can lead to the creation of knowledge. In a lecture-based education approach, the idea of pharmakon manifests itself in students' tendencies to cram the information they learn in preparation for their exams and then forget what they have learned almost immediately after completing their assessments. While students do gain knowledge in the

short-term, it is quickly lost in the long-term. Ultimately, viewing this education model from the lens of pharmakon reveals that the harmful effects of lectures outweigh its benefits. On the other hand, students engaged in experiential learning are able to experience more of the beneficial aspects of pharmakon. Learning through experience might cause students to lose their old ideas and beliefs, but they are able to quickly acquire new ones.

Lastly, an evaluation of educational methods necessitates a dissection of the four experts' opinions of the new, ideal ways of depicting information. Horton argues that an ideal essay enables its readers to be exposed to new ways of thinking. An experiential learning approach fulfills Horton's belief, as students are exposed to new outlooks through reflection, experience, and experimentation. Secondly, Edelman's ultimate conclusion in his text is that low-resolution models should be used more often because when presented with rough sketches or outlines, people tend to develop new ideas rather than refine existing ones. Edelman's recommendation can also be extended to education. While lectures limit students' innovation and can only refine their understanding of the material at hand, the unstructured approach of experiential learning offers students the opportunity to engage with academic material in ways they may have never considered before. Thirdly, throughout his lecture series, Victor strongly advocates for the creation of a new medium for communicating knowledge that is able to link multiple different representations of a given system. In a sense, this new form of media that Victor is advocating for is similar to experiential learning, which also draws from various different areas such as exploration, reflection, connection with others, and action. Lastly, Steigler ultimately deduces in his text that tools for social networking need to be greater utilized in media moving forward. His deduction, when extended to the field of education, leans in favor of experiential learning. While lectures are very distant and impersonal, an integral facet of experiential learning involves

students engaging with their peers to share their newfound knowledge and reflect on their experiences.

In summary, exploring the arguments of Horton, Edelman, Victor, and Steigler on the topics of media, innovation, and ideal information mediums exposes the shortcomings of lecture-based instruction and reveals that the optimal education model is experiential learning.