

Project #3

Title: Does AI pose a potential existential threat to colleges and universities?

Organization: GFE's Postsecondary Access and Attainment (PSA2) Impact Group

1) Issues/Questions: The astounding recent progress in Artificial Intelligence is already having significant impacts within education at all levels for students, faculty, and administration. At a more macro level, however, AI could potentially pose an existential threat to postsecondary institutions from two directions. First, as AI increases the productivity of more and more professionals, it may reduce the number of those types of professionals that organizations need to hire. Already, reports of AI squeezing out entry-level positions have been widely published. As this becomes more recognized, will it reduce enrollment at traditional brick-and-mortar postsecondary institutions? Second, as AI tutors become better and better, even recognizing and responding to the facial expressions and body language of learners, for example, when they become confused or bored, will that also reduce the demand for traditional brick-and-mortar postsecondary institutions?

2) Goals: We would like a synthesis of research studies that have investigated these questions, and if it does appear that traditional postsecondary institutions are indeed threatened, we would like to know what they can do to adapt to such changing needs, and what philanthropy can do to support such adaptations.

3) Research Questions:

- What professional occupations are likely to see a reduction in employment because of AI?
- As a result of those changing employment patterns, which college majors are the most likely to see a reduction in enrollment, how severe is that reduction likely to be, and over what time frame?
- AI-based tutors are likely to become available soon, using “real” AI-generated images of a tutor “talking” one-to-one with a student, and as those tutors become increasingly able to adapt to “their” students’ expressions of confusion, boredom, or impatience. (For an example of AI-generated “people,” see this short AI-generated video: https://www.youtube.com/watch?v=3sVO_j4czYs.) If this does come about, what will the likely impact be on enrollment in traditional postsecondary institutions?
- How should colleges and universities prepare to adapt to such impacts on their enrollment?
- How can Philanthropy help colleges and universities with such preparation and adaptation?

4) Use of Results: We will disseminate the report among the 300+ members of the Postsecondary Access and Attainment Impact Group (PSA2) within Grantmakers for Education, so that the members’ philanthropic employers can benefit from this forward look at a potentially serious impact of AI on their work.

5) Preliminary Research: A similar study was funded by some members of PSA2 for the impacts of AI on Career and Technical Education (CTE), but that did not investigate the impacts on traditional professional career tracks within four-year institutions. Nevertheless, many of the

references in that paper shed light on this proposed research topic, and indicate some urgency for doing this research.