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Higher education choice-making in the United States: freedom, inequality, legitimation

Kevin J. Dougherty

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Higher education choice-making in the United States: freedom, inequality, legitimation¹

Kevin J. Dougherty

Kevin J. Dougherty is Professor of Higher Education and Education Policy in the Department of Education Policy & Social Analysis at Teachers College, Columbia University

Abstract

Key words: higher education access, higher education choice, social reproduction, social stratification, behavioural economics, social psychology of inequality

This paper examines how the process of making higher education choices in the United States – whether to enter higher education, attend a particular college, or follow a particular route – reproduces and legitimates social inequality. The paper’s central thesis is that a societal regime of many choices – while widely seen as serving individual freedom and producing social well-being – actually builds on and extends societal inequality but in a way that obscures that process of social reproduction to virtually all who participate in that regime. As the paper argues, the provision of many choices *produces* social inequality. People often make choices that do not serve their interests as well as they might wish, particularly if students are faced with many choices and do not have adequate information. Secondly, the incidence of those suboptimal choices is not random but is socially stratified. It is higher for less advantaged people, and societal factors – such as the unequal distribution of economic resources, unequal

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provision of good information, and unequal exposure to discrimination – play a crucial role in producing those socially stratified suboptimal choices. Finally, the provision of many choices *legitimizes* social inequality. The more one thinks in terms of choices the more one tends to blame the unfortunate, including oneself, for their circumstances. Seemingly offered many choices in life, both the winners and losers in society come to feel that much of the inequality they experience is due to their own actions and therefore is legitimate. The paper concludes by offering various prescriptions for reducing the socially stratifying consequences and ideological impacts of a high-choice regime. In making these arguments, this paper draws on the research literature in sociology of education, behavioural economics, and social psychology of inequality.

A. Introduction

Choice is a key part of the belief structure and culture of the United States. Americans believe deeply in the personal and social usefulness of being able to make many choices (Markus & Schwartz, 2010; Savani & Rattan, 2012; Savani, Stephens, & Markus, 2011). This shows up in many ways. We can note the frequency with which people talk about “freedom of choice” or the frequency of freedom as a theme in advertising, as in the slogans “you choose” or “have it your way” (Markus & Schwartz, 2010).

The American emphasis on choice is understandable because choice can drive social efficiency and is important to personal expression and happiness. The provision of individual choice allows social arrangements to better take into account the variety of interests in a diverse population. Lack of choice often leaves us unable to pursue our particular “design for living” and makes us unhappy (Iyengar & Lepper, 2000, 2002; Markus and Schwartz, 2010). Choice is an important factor (along with competence and good relationships with others) that helps build intrinsic and deeply internalised extrinsic motivation (Ryan & Deci, 2000).¹

Because of the positive impacts of choice, all sorts of efforts are made to increase how much choice people can exercise. For example, in U. S. education, sustained efforts have been made to increase school and college choice, whether through the provision of charter schools, for-profit colleges, or new college majors (Dill, 2007; Espeland & Sauder, 2017; Fox & Buchanan, 2017; Hunt, Callender, & Parry, 2017; Roksa & Robinson, 2016). Moreover, over the last forty years, the federal government, private organizations, and newspapers and magazines have moved to “empower” students as educational “consumers” by shifting the recipients of financial aid from colleges to students and by making efforts to create college scorecards and league tables to inform students (Dill, 2007; Dougherty, 2013; Espeland & Sauder, 2017; Kelly & Schneider, 2011).

However, choice also has a darker side (Botti & Iyengar, 2006; Schwartz, 2014) that I wish to explore in this paper. As I will argue, the provision of large amounts of choice reproduces social inequality, and it does so in three crucial ways. First, the provision of many choices *legitimizes* social inequality. The more one thinks in terms of choices the more one tends to blame the unfortunate, including oneself, for their circumstances. Seemingly offered many choices in life, both the winners and losers in society come to feel that much of the inequality they experience is due to their own actions and therefore is legitimate. Second, the provision of many choices *produces* social inequality. People often make choices that do not serve their interests as well as they might wish, particularly if they are faced with many choices and do not have adequate information. But third, the incidence of those suboptimal choices is not random but is socially

stratified. It is higher for less advantaged people than it is for more advantaged people, and societal factors – such as unequal provision of information -- play a crucial role in producing those suboptimal choices. The result of all this is that a societal regime of many choices – particularly when necessary information is not widely and equally distributed – reproduces societal inequality in a way that obscures that process to both the winners and losers in that high-choice regime.

To make these arguments, I draw on a variety of social science literatures including sociology of education, behavioural economics, and cognitive and social psychology. The paper focuses on one particularly important realm of choice: education decisions pertaining to whether to enter higher education, which college to attend, and what path to take through college. The reason for focusing on choice-making in higher education is that it has come to play a central role in the transmission and legitimation of social inequality (Archer, Hutchings, & Ross, 2003; Bourdieu & Passeron, 1990; Brown, 1995; Collins, 1979; Karen & Dougherty, 2005; Reay, David, & Ball, 2005).

B. Choice as legitimation of social inequality

Choice legitimates inequality in two ways. It affects how people judge their own social situation, with those who encounter misfortune often blaming themselves. And choice affects how we judge others, leading us to see the unfortunate as authors of their own fate.

Attitudes toward one's own social situation

American culture puts great emphasis on individualism and self-determination (Huber & Form, 1973; Iyengar & Lepper, 2002; Kluegel & Smith, 1986; Kusserow, 2012; Markus & Schwartz, 2010; Ryan & Deci, 2000; Sahar, 2014; Shepelak, 1987). Americans are also strongly predisposed to see life outcomes as due to internal as versus external factors.² This American emphasis on self-determination and choice makes it likely that those who experience disadvantage will perceive it as the product of their own choices and therefore blame themselves (Della Fave, 1986; Shepelak, 1987).³

Psychological research finds that those who subscribe to the importance of choice are more likely to blame themselves and experience depression when the results of their choices do not meet their expectations (Bauer, 2011; Markus & Schwartz, 2010; Roese et al., 2009; Savitsky, Medvec, & Gilovich, 1997; Wrosch & Heckhausen, 20002). This comes out particularly clearly in studies of regret. A typical definition of regret is: “A comparison-based emotion of self-blame, experienced when people realize or imagine that their present situation would have been better had they decided differently in the past” (Zeelenberg & Pieters, 2007, p. 4). It should be noted that the issue is not just

choice but also making comparisons. One can be happier with one's choices if one is not prone to compare them with the other choices one could have made or that others make. However, high-choice regimes also tend to make us more prone to this invidious comparison.

For example, in a survey of 720 older adults (mean age 74) who took part in Lewis Terman's study of "geniuses," there were 345 mentions of regret over actions taken or not taken over the course of their lives (Gilovich & Medvec, 1995, p. 382). Among the choices made or not made, those involving education stood out as among the most important. One third of the regrets stated involved higher education: respondents saying they should have attended college or needed more education (6%); they should have delayed admission to university or high school until older (2%); they should have completed college or graduate school (11%); they should have worked harder and not wasted college time (5%); they should have studied different subjects/majors (8%) (Gilovich & Medvec, 1995, p. 382). Similarly, a meta-analysis of nine studies found that education is the number one regret of Americans, accounting for 32.2% of all reported regrets (Roese and Summerville, 2005, pp. 1274, 1276). Moreover, in a population survey (response rate of 20.5%) where respondents volunteered domains rather than being presented with them, education ranked third (along with careers) among expressed regrets, after romance and family (Morrison & Roese, 2011, pp. 578, 580).

These regrets about education often have a strong air of self-blame: the statements made by the Terman-study respondents included that they should have completed college or graduate school or should have worked harder and not wasted college time (Gilovich & Medvec, 1995: 382). And these regrets can become even more pointed and self-blaming in the case of working class and minority respondents. In Jay MacLeod's path breaking study, *Ain't No Making It* (2009), the working-class Brothers and Hallway Hangers identified bad choices in the past – particularly not applying themselves in school -- as one reason they did not take advantage of opportunities presented to them (McClelland & Karen, 2009: 447-448, 453).⁴

Similar findings about the impacts of invoking a choice framework emerge in a study of social attitudes among mothers who left the labour force. When surveyed, women who endorse a choice framework in explaining why they left work are less likely to perceive discrimination and structural barriers to women's advancement in society (Stephens & Levine, 2011, pp. 1232-1233). In addition, in a social experiment involving a mixed-gender group of college undergraduates, those experimentally primed with a choice framework are significantly more likely to state that gender discrimination is nonexistent. An experimental group was primed to think about choice via viewing a poster in the background of the interview room saying "Choosing to Leave: Women's Experiences away from the Workforce," while the control group viewed a neutral poster saying "Women at Home: Experiences away from the Workforce." The study found that the

experimental group was significantly more likely to state that gender discrimination is nonexistent and that men and women are equal in American society (Stephens & Levine, 2011, p. 1234).

The emphasis on choice in US culture is closely allied to two other value/ideological structures -- individualism and meritocracy – that have similar impacts on judgments about self and others (Feagin, 1972; Hochschild, 1995; Kluegel & Smith, 1986; Sahar, 2014). For example, when primed with meritocratic statements,⁵ women in an experimental group were significantly less likely than women in the control group to view their hypothetical rejection by a male supervisor for a job as due to discrimination (McCoy & Major, 2007, pp. 344-346).⁶ Moreover, when primed with meritocratic statements and asked to read an article that contended that prejudice against women was pervasive, women in the experimental group were significantly more likely than unprimed women in the control group to justify women's disadvantage and to deny discrimination was involved (McCoy & Major, 2007, p. 349).

Attitudes toward the misfortunes of others

The wide provision of choice affects not just attitudes to one's own social circumstances but also to those of others. Recent experiments in social psychology point to how – when subjects are primed to think in terms of choice – they are much more likely to blame disadvantaged people for their situation, believe the rich deserve what they have, and oppose policies to redistribute resources (Cappelen, Fest, Sorensen, & Tungodden, 2013; Ogletree, Archer, & Hill, 2016; Savani & Rattan, 2012; Savani, Stephens, & Marcus, 2011; Stephens & Levine, 2011). It should be noted that these “blame the victim” attitudes have been long present in US society (Espinoza, 2016; Ryan, 1971).

In various social experiments, an experimental group was primed to think in terms of choice by such means as being asked to list five choices they had made during different times of day (while the control group just listed five activities) or -- watching a video of an actor engaging in series of everyday actions at home -- being asked to indicate every time the actor seemingly made a choice. Meanwhile, the control group was just asked to indicate every time the actor touched an object for the first time (Savani & Rattan, 2012; Savani, Stephens, & Markus, 2011). When primed in these ways to think about choice, experimental-group subjects:

- more often blame victims when shown vignettes of people in trouble e.g. having a heart attack, losing a home because of collapse, experiencing a car accident, suffering physical abuse (Savani et al., 2011, pp. 798-799);
- less often agree that rich people have become rich due to favourable social conditions (Savani & Rattan, 2012, pp. 799);

- more often believe that rich people should be able to keep their wealth (Savani & Rattan, 2012, p. 800);
- are less disturbed when given 10 statistics about income inequality (Savani & Rattan, 2012, pp. 798).⁷

In a related vein, a study of 290 adults recruited through Amazon's Mechanical Turk job contracting service found a strong connection between belief in meritocracy and likelihood to blame disadvantaged groups. Meritocratic beliefs were significantly associated with the belief that various disadvantaged groups (Blacks, working class people, less educated people, and the obese) were responsible for their condition and were to be blamed for it (Kuppens, Spears, Manstead, Spruyt, & Easterbrook, 2017, p. 15).

C. The forms and impacts of higher education choices

The ideological impact of choice reflects two realities. On the one hand, people make many choices in higher education and those choices have a major impact on their lives. On the other hand, those choices are strongly and often silently shaped and distorted by an unequal social structure in ways that obscure their social causation. This makes higher education choice-making a particularly potent way of legitimating inequality.

People considering higher education face a host of fateful choices. They must decide whether to enter higher education at all and which institutions to shoot for. College going is of course connected to securing a college degree and those with college degrees receive considerably higher occupational and income payoffs than those who only have a high school degree (Belfield & Bailey, 2017; Grubb, 2002; Oreopoulos & Petronijevic, 2013; Pascarella & Terenzini, 2005). For example, all other things being equal, holders of a baccalaureate degree earn as much as a third more per year than do high school graduates (Grubb, 2002; Pascarella & Terenzini, 2005).

Which college one attends also matters. Attending a more selective college is associated with greater likelihood of graduating from college and securing a well-paying job, even after controlling for student characteristics on entry to higher education (Alon & Tienda, 2005; Astin & Oseguera, 2005; Bastedo & Flaster, 2013; Cohodes & Goodman, 2012; Pascarella & Terenzini, 2005; Smith, Pender, Howell, & Hurwitz, 2012; however, see Dale & Krueger, 2002). For example, baccalaureate aspirants who attend community colleges first are 15-20% less likely, all other things being equal, to secure a baccalaureate degree than comparable students first entering four-year colleges (Dougherty, 1994; Long & Kurlaender, 2009; and Monaghan & Attewell, 2015).

Finally, which pattern of attendance a student chooses also has an impact. Part-time and discontinuous attendance and attendance of multiple institutions tend to delay college completion and raise the probability of not completing (Adelman, 1999; Cabrera, Burkum, & LaNasa, 2005; Peter & Cataldi, 2005). Also, the wrong choice of programme and courses can also greatly delay securing a degree. If one wishes to transfer from a community college to a university, certain programmes and courses at the community college have ready analogues at the university while others do not, thus hindering or even precluding transfer (Dougherty, 2002; Handel & Williams, 2012; Wyner, Deane, Jenkins, & Fink, 2016).

D. The social shaping of higher education choices

The popular conception of choice often makes it seem as if the fateful choices detailed above are the product of individual taste and effort. In education, this often shows up in the simple and uncritical attribution of choice to individualist and meritocratic factors such as educational aspirations and academic ability without attention to how ability and aspirations are shaped by social inequality. This simple individualistic analysis fails to acknowledge how deeply student choices are shaped by powerfully unequal social forces, with the result that students' educational choices reflect and reproduce social inequality.

More individualistic determinants of choice

Individualistic analyses that focus on student responsibility for their choices tend to focus on two main factors: academic ability and educational aspirations. Both, however, are insufficient explanations of student choices. Other, more structural factors also play an important role, both shaping academic preparation and educational expectations and exerting an impact through other channels.

Academic preparation

Academic preparation is clearly a major determinant of student choices. Less prepared students are more likely to decide not to attend college, choose less selective colleges, pick less rigorous and remunerative majors, and pursue less coherent pathways through higher education (Bastedo & Jaquette, 2011; Grodsky & Jackson, 2009; Karen, 2002; see also Chowdry, Crawford, Dearden, Goodman, & Vignoles, 2012). Moreover, academic preparation is one of the key factors determining which students are admitted by selective colleges (Bowen, Kurzweil, Tobin, & Pilcher, 2005; Karen, 2002).

But differences in academic preparation only partially explain differences in the educational choices students make. This has been brought out forcefully in studies of

educational undermatching. These encompass situations where people go to college or attend selective colleges at a lower rate than they are capable of, based on their previous academic preparation (Bowen, Chingos, & McPherson, 2009; Deutschlander, 2017; Hoxby & Avery, 2012; Roderick, Coca, & Nagaoka, 2011; Smith, Pender, & Howell, 2013).⁸

Undermatching can occur with respect to college going per se. For example, a study using the Educational Longitudinal Study of 2002 (ELS:2002) estimated that 23% of US high school sophomores nationwide undermatched by not enrolling in higher education although they could have done so, based on their high school record (Deutschlander, 2017). Similarly, another study using ELS:2002 data found that, even among high school sophomores in 2002 who were judged as taking a “standard” curriculum,⁹ 13% had not enrolled in postsecondary education of any type by 10 years later (Chen, Lauff, Arbeit, Henke, Skomsvold, & Hufford, 2017, Table C-4a). This undermatching is striking because of the wide availability of community colleges, most of which do not even require a high school degree in order to admit a student (Cohen, Brawer, & Kisker, 2013).

Research on undermatching has also examined students who do go to college but enrol in a less selective institution than they were qualified for, on the basis of their achievement test scores and high school grades. Using national data, Jonathan Smith and colleagues estimated that 23.6% of US college entrants enrol at a college that is less selective than what they are capable of entering, based on the characteristics of the students who did enrol in those colleges (Smith et al., 2013, pp. 248, 253-254). Meanwhile, Deutschlander finds that 22% of college entrants in the national Educational Longitudinal Study undermatch (Deutschlander, 2017, pp. 169-170).¹⁰

Variations by student background in the pathways they take through college are also not fully explained by differences in academic preparation. Social class and racial differences in choice of major often persist even after controlling for prior academic preparation (Goyette & Mullen, 2006; Porter & Umbach, 2006). Moreover, lower SES students end up in less continuous pathways through higher education – less often going full-time or continuously -- even when we control for high school test scores, GPA, and curriculum intensity (Goldrick-Rab, 2006).

Undermatching is distributed in a socially stratified way. It is more typical among students coming from lower socioeconomic status (SES) and nonwhite backgrounds (Bowen et al., 2009; Deutschlander, 2017; Dillon & Smith, 2013; Roderick et al., 2011; Smith et al., 2013). For example, in their analysis of national data, Smith et al. find that the undermatching rate (not going to college or attending a less selective college than one might qualify for) was 49.6% for students in the bottom half in socioeconomic status (SES) but 34% for those in the top half in SES (Smith et al., 2013, pp. 248, 254-256).

Similarly, the students less likely to take the paths with higher probability of completion are those more socio-economically and racially disadvantaged (Cabrera et al., 2005; Dougherty & Kienzl, 2006; Goldrick-Rab, 2006; Hearn, 1992).

The individualist analysis is undercut not just by pointing out that academic preparation only explains part of college going, college choice, and college success but also by noting that academic preparation is of course also socially shaped. It is also important to acknowledge how differences in academic preparation are themselves produced in good part by social inequality in family and school resources (see, for example, Lareau, 2011; Lareau & Calarco, 2012; Reardon, 2011; Roscigno, 1999; Steele, 1999).

Educational expectations

Students' choices about higher education and the class and race differences in college access and destination that they produce are often attributed as well to something like taste, to the differing expectations students and their parents and significant others have for what is desirable and possible in higher education (Hossler & Gallagher, 1987; Sewell & Hauser, 1975; Somers, Cofer, VanderPutten, 2002). Even though educational aspirations have grown enormously in all social groups and have converged significantly (Schneider & Stevenson, 2000), sizable differences still remain by social class and, less so, race-ethnicity. In a national survey of US 9th graders in 2009, 76% of those in the top quintile in socio-economic status (SES) stated that they expected to receive a bachelor's degree or higher, while the comparable percentage for those in the bottom quintile was only 41%. Meanwhile, the figures for Asian, white, Black, and Hispanic 9th graders were, respectively, 63%, 60%, 58%, and 47% (U.S. National Center for Education Statistics, 2011, p. 11).¹¹

Class and race-ethnic differences also show up in what students seek in type of college. For example, socially advantaged US students will tend to favour highly selective institutions, with minimal consideration of less selective ones, with the converse for working class students (Mullen, 2010; see also Reay et al., 2005). Underlying this difference are divergent ideas about the aims of college, with students differing in the relative weight of personal development or of convenience. Personal, cultural and psychological development is given more weight by upper class and upper middle-class students, and skill development, affordability, and convenience are given more weight by working-class students (McDonough, 1997, chap. 2; Mullen, 2010, chap. 4). Also, while most students look for a sense of belonging – a sense of a good fit between the culture of an institution and their own class and racial cultures – students of different backgrounds vary in whether they regard particular institutions as providing a good fit. Working-class and minority students are less likely to perceive highly selective institutions with a preponderance of economically and racially advantaged students as comfortable places to attend (Harper & Hurtado, 2007; Mullen, 2010; see also Bowes,

Peck, Thomas, & Nathwani, 2013; Burke, 2012; Crozier, Reay, & Clayton, 2010; Gorard, Adnett, May, Slack, Smith, & Thomas, 2007; Hockings, Cooke, & Bowl, 2010; Reay et al., 2005).

Educational expectations at first might seem to be simply matters of taste. But as many of the studies cited above show, social inequality deeply shapes those expectations. This was a point underscored by the French sociologist Pierre Bourdieu. His concept of habitus points to how educational desires and expectations are shaped by socially structured perceptions of unequal probabilities of economic success (Bourdieu, 1977, 1984; Swartz, 1997). Bourdieu defines habitus as a set of only partly conscious perceptions, appreciations, and actions held by a social group that integrates past experiences and shapes future behaviour within specific social sectors or “fields” such as education (Bourdieu, 1977; Bourdieu & Wacquant, 1992; Swartz, 1997).¹² More concretely, habitus includes such elements as how people define normal and desirable life and career trajectories, what strategies are most useful for pursuing those trajectories, what kinds of schooling and work they see as desirable and possible, and how they see themselves fitting within various social institutions such as education (for example, do they see selective colleges as imaginable or even as desirable) (Ball, Davies, David, & Reay, 2002; Fiske, Moya, Russell, & Bearn, 2012; Hodgkinson & Sparkes, 1997: 35; Lamont, 2000; Lareau & Weininger, 2003, 2008; Reay et al., 2005; Williams, 1995; Williams, 2012; Willis, 1977).

Bourdieu argues habitus is socially shaped and stratified. It arises from “objective limits [that] become a sense of limits, a practical anticipation of objective limits acquired by experience of objective limits, a ‘sense of one’s place,’ which leads one to exclude oneself from the goods, persons, place and so forth from which one is excluded” (Bourdieu, 1984, p. 471). The system of social stratification shapes educational expectations or habitus more generally by such means as differences in capacity to pay for college and cope with economic risk, to secure information about college requirements and prospects, and to buffer oneself from discrimination (Bourdieu, 1977, 1984; Devine, 2004; Lareau, 2011; Reay et al., 2005). We now turn to these social constraints placed on individual choices.

More structural determinants of choice

There are many social constraints on student decisions about higher education. However, three stand out as particularly important: differences in economic resources (including financial aid) and buffers against economic risk; differential access to high quality information about college and college choices; and differential experience of discrimination.

Economic resources

Economic resources play an important role in shaping student choices about college, both directly and indirectly (Bastedo & Jaquette, 2011; Devine, 2004; Goldthorpe, 1996; Grodsky & Jackson, 2009; Karen, 2002; Sewell & Hauser, 1975). A direct indication of the influence of economic resources is that US students who receive financial aid are more likely to enter college, attend more selective colleges, and eventually receive a degree than comparable students who do not receive such aid (Astin & Oseguera, 2005; Cabrera et al., 2005; Desjardins, Ahlburg, & McCall, 2002; Dynarski & Scott-Clayton, 2013; Scott-Clayton, 2017).¹³ It is estimated that an additional \$1000 of grant (scholarship) aid increases – all other things being equal – the probability that a US student enrolls in college by 3 to 5% (Dynarski & Scott-Clayton, 2013, p. 79; Long, 2008, pp. 18-20; Scott-Clayton, 2017, pp. 19-20).¹⁴

But we should not think of economic resources simply in terms of ability to pay for college. Economic resources also allow students to not be obligated to support their families (if only by becoming financially independent more rapidly). This allows students to consider higher education paths that take longer before one enters the labour force and might be riskier in terms of completion and economic payoff. Economic resources also facilitate those longer-term paths by buffering students from the danger and actuality of financial crises – due to such factors as the death, disability, or job loss of a parent – that may make it impossible to continue in college (Breen & Goldthorpe, 1997; Goldthorpe, 1996). All of these aspects of the possession of economic resources help shape the educational expectations embedded in habitus. Possessing money to pay for college, not having to help support the family, being protected against financial crisis, and having money to repair one's record when one is not doing well in school allow upper class and upper middle class students (and their parents) to more often develop expectations for more expensive, longer, and therefore remunerative higher education (Devine, 2004).¹⁵ And of course, financial resources shape academic preparation by allowing parents to pay for better schools, tutoring, and test preparation (Lareau, 2011; Lareau, 2015; Lareau & Calarco, 2012; Roscigno, 1999; Sacks, 2007; see also Devine, 2004).

A key source of differential access to economic resources in the form of financial aid is differential access to information about how to secure such aid (Scott-Clayton, 2013, 2017). We now turn to that subject.

Information provision and cultural capital

Information provision plays a key role in educational decisions and its distribution is highly unequal across class and racial lines (Ball et al., 2002; Castleman, Schwartz, & Baum, 2015; Deutschlander, 2017; Grodsky & Jones, 2007; Hutchings, 2003; Kirst &

Venezia, 2004; Lareau, 2015; Nienhusser & Oshio, 2017; Perna, 2006; Plank & Jordan, 2001; Reay et al., 2005; Robinson & Roksa, 2014; Roderick, Coca, & Nagaoka, 2011; Stanton-Salazar, 1997). It is the importance and unequal distribution of information about higher education that warrants treating it as a form of cultural capital (Bourdieu, 1977, 1986; Bourdieu & Wacquant, 1992; Lareau, 2015; Lareau & Weininger, 2003).

Key types of information affecting college going and success in the United States are the following:

- The real cost of selective colleges: that is, the net price of college after financial aid is taken into consideration (Kirst & Venezia, 2004; Lareau, 2015; Nienhusser & Oshio, 2017; Roderick et al., 2011; Smith et al., 2012; Terenzini, Cabrera, & Bernal, 2001).
- The importance of filling out the Free Application for Federal Student Aid (FAFSA) and how best to do it (Bettinger, Long, Oreopoulos, & Sanbonmatsu, 2013; Kirst & Venezia, 2004; Smith et al., 2012).
- The characteristics of different colleges and majors, which ones may be a good match academically and socio-culturally for students, and what their graduation and job placement records are (Deutschlander, 2017; Myers & Myers, 2012; Smith et al., 2012; Terenzini et al., 2001; see also Ball et al., 2002; Davies, 2012; Hutchings, 2003; Reay et al., 2005; Whitty, Hayton, & Tang, 2015).
- What kinds of student preparation and qualities are sought by colleges generally and by selective colleges specifically e.g. courses and grades required; Scholastic Aptitude Test and ACT scores needed; and extracurriculars preferred (Deutschlander, 2017; Kirst & Venezia, 2004; Lareau, 2015; Myers & Myers, 2012; Plank & Jordan, 2001; Roderick et al., 2011; Vargas, 2004; see also Ball et al., 2002; Leathwood & Hutchings, 2003; Smith, Joslin, & Jameson, 2015).
- Where one stands in the distribution of academic preparation and what are the benefits of taking a test preparation course (Buchmann, Condrón, & Roscigno, 2010; Deil-Amen & Tevis, 2010)
- The mechanics of the college application system, including the benefits of applying for early decision and applying to multiple colleges (Avery & Kane, 2004; Bowen et al., 2005; Kao & Tienda, 1998; Karabel, 2005; Karen, 2002; McDonough, 2004; Smith et al., 2012).
- How to conduct an effective college search (Hamrick & Hossler, 1996; Roderick et al., 2011; see also Higher Education Funding Council for England, 2014).

But if information is powerful, it is also socially stratified. Less advantaged students and parents receive less information and poorer information about college than do more advantaged students (Deutschlander, 2017; Grodsky & Jones, 2007; Horn, Chen, & Chapman, 2003; Kelly & Schneider, 2011; Kirst & Venezia, 2004; Lareau & Cox, 2011; Lavecchia et al., 2014; Perna & Titus, 2005; Rosenbaum, Ahearn, & Rosenbaum, 2017;

Rosenbaum, Deil-Amen, & Person, 2006; Rowan-Kenyon, Bell, & Perna, 2008; Terenzini et al., 2001; Tornatzky, Cutler, & Lee, 2002; see also Ball et al., 2002; Hutchings, 2003). For example, in the 1999 National Household Education Surveys Program, only 34.8% of US parents with incomes \$25,000 or less stated that they had obtained information on tuition or fees or could accurately estimate them for the colleges their children planned to attend, but the comparable percentage for parent with incomes over \$75,000 was 75% (Horn et al., 2003, p. 21).¹⁶

These differences in amount and quality of information about higher education reflect not just the varying efforts of parents and students of different classes and races to acquire college information but also institutional discrimination in the allocation of resources.

Institutional discrimination

Discrimination plays an important role in producing class and race differences in higher education choice-making by shaping the factors described above. Student academic preparation is affected by discrimination in the provision of resources such as access to rigorous academic courses (such as Advanced Placement) and skilled teachers (Clotfelter, Ladd, & Vigdor, 2005; Lankford, Loeb, & Wyckoff, 2002; Roscigno, 2009).¹⁷ For example, studies of the distribution of teachers in New York State and North Carolina find that schools with higher proportions of nonwhite and poor students have higher proportions of novice teachers or teachers who are less well trained (Clotfelter et al., 2005; Lankford et al., 2002).

Furthermore, student access to information is shaped by unequal access to counselling and by the varying attitudes of counsellors to students of different backgrounds. Working class and minority students in the United States tend to have fewer college counsellors while in high school, get less time with them, and receive poorer advice on their college options (College Board, 2011; Kirst & Venezia, 2004; McDonough, 1997, 2004; Perna et al., 2008). For example, a survey of US high school counsellors by the College Board (2011) found that in schools where 75% or more of the students were poor (that is, receiving free or reduced-price school lunch), the student to counsellor ratio was 427 to 1, but in schools where 24% or fewer students were on free or reduced school lunch, the comparable figure was 352 to 1. Furthermore, in schools where 75% or more of the students were of minority background, the student to counsellor ratio was 429 to 1, but in schools with a minority percentage of 24% or less the comparable figure was 359 to 1 (College Board, 2011, pp. 49-50). These differences are consequential. Studies of the impact of college counselling find that – net of student background, academic achievement, and high school institutional characteristics – students who meet with counsellors are significantly more likely to apply to and enrol in college

(Belasco, 2013; Cabrera & LaNasa, 2000; Hurwitz & Howell, 2014; Lavecchia et al., 2014; Robinson & Roksa, 2014).

Finally, student educational expectations are shaped in part by the expectations of teachers and counsellors, expectations that are shaped by the social class and race of students (Dee, 2005; Egalite & Kisida, 2018; Gershenson, Holt, & Papageorge, 2016; Holland, 2015; McDonough, 1997; Persell, 1977). For example, in a multivariate fixed-effects analysis of data from the Educational Longitudinal Study of 2002, Gershenson et al. (2016) find that non-Black teachers of Black students are significantly less likely to expect them to attain a bachelor's degree than are Black teachers. This impact was even more pronounced for Black male students, particularly in mathematics (Gershenson et al., 2016, pp. 219-221).

E. Reducing socially stratified and stratifying higher education choice-making

In the following, I focus on equalising the provision of information. This does not mean that other initiatives – such as providing more and better financial aid and improving academic preparation – are not important. But those have already garnered wide attention¹⁸ and information provision has not been given as much attention as it deserves.

To reduce the role of information inequality in structuring educational choices so that they reproduce and legitimate social inequality, we need to think of four strands of change. One strand involves providing high quality information more equally through improved counselling and other forms of information provision during middle and high school. However, because students will still make mistakes, we also need to reduce the impacts of bad choices by creating the means to monitor student progress and intervene when students go off course. Third, we need to think more structurally, by designing an “architecture of choice” that nudges students toward better choices (Thaler & Sunstein, 2008; Thaler, Sunstein, & Balz, 2013). Finally, and most sweepingly, we need to better illuminate the process of choice so that student choosers and their observers less often equate choice with individual self-expression and democracy and are more aware of how choice-making is a socially stratified and social stratifying process. Let us explore each of these points in turn.

More equal distribution of high quality information

A range of studies provide powerful guidance on what we can do to provide more and better information on higher education to students of all backgrounds (Bailey, Jaggars, & Jenkins, 2015; Castleman et al., 2015; Rosenbaum et al., 2006, 2017; see also

Diamond et al., 2014; Reay et al., 2005). To begin, we know that providing high quality information more widely – particularly to less advantaged students – can have a major impact on student choices.¹⁹ A number of randomised control trials have found that providing information about college costs and financial aid and providing assistance with filling out financial aid forms and college applications can significantly increase applications to colleges overall, applications to more selective colleges in particular, enrolment in higher education, and enrolment in more selective institutions (Avery, 2013; Bettinger et al., 2013; Carrell & Sacerdote, 2013; Castleman, Arnold, & Wartman, 2012; Hoxby & Turner, 2013; Kelly & Schneider, 2011; Lavecchia, Liu, & Oreopoulos, 2014). For example, Hoxby & Turner (2013) conducted an experiment involving a group of 3,000 high achieving, low income high school seniors.²⁰ Students in the experimental group were exposed to a comprehensive intervention involving application guidance, information on college costs, and assistance in applying for admissions-fee waivers.²¹ The study found that students in the experimental group submitted 19% more applications, applied to institutions that averaged 34 points higher in median SAT/ACT scores, and were admitted to 12% more colleges and those colleges had median SAT/ACT scores that were 21 points higher (Hoxby & Turner, 2013, pp. 23-24).

To provide better and more equal information, we need to invest in much better advising structures. We need to improve information provision by increasing the number of high school counsellors (particularly in high schools serving less advantaged students), expanding supplementary outreach programmes (such as the federal TRIO programmes and their state and private counterparts),²² incentivizing colleges to reach out more to high school students, and making more extensive use of electronic databases, social media, and text messaging (Castleman & Page, 2015; Haskins & Rouse, 2013; Kirst & Venezia, 2004; Lavecchia et al., 2014; Perna et al., 2008). We also need to provide much better counseling in higher education, particularly in community colleges (Bailey et al., 2015; Dougherty, Lahr, & Morest, 2017; Jenkins, Lahr, & Fink, 2017).

Several studies have demonstrated the impact of increasing the number of counsellors in American high schools (Carrell & Hoekstra, 2014; Hurwitz & Howell, 2015; but see Reback, 2010). For example, in a regression discontinuity analysis, Hurwitz and Hoekstra (2015) find that providing an additional high school counsellor per school has a statistically significant impact on the percentage of graduating seniors who attend four-year colleges in the year following high school graduation. In a typical high school, an additional high school counsellor would be predicted to increase the number of students going to four-year college by 10% (Hurwitz & Howell, 2015, p. 323).

Supplementary outreach programmes that are separate from regular high school counsellors also have a role to play. To be sure, evaluations of the main federal TRIO programmes (such as Upward Bound, Talent Search, GEAR UP) are not always based

on rigorous research designs and have yielded mixed results (Cahalan, 2013; Haskins & Rouse, 2013; see also Domina, 2009). However, experimental and quasi-experimental evaluations of state programmes such as Texas's GO Centers and private programmes such as College Possible and Bottom Line Texas have found significant impacts on enrolment in more selective institutions (Avery, 2013; Castleman & Goodwin, 2018; Cunha, Miller, & Weisburst, 2017). Hence, these supplementary outreach programmes should remain an important part of the effort to provide more and better information to less advantaged students, particularly those who are less likely to be able or willing to draw on traditional college counselling staff in high schools.

These traditional outreach programmes can fruitfully draw on new technology. At the very least, at the national level, the United States could make a more extensive effort to provide easily accessible and digestible data on institutional characteristics and outcomes similar to the Unistats system in England. Among other things, the Unistats system requires that each English higher education institution provide a portal to a national site that allows comparison among programmes (majors) in different institutions on a Key Information Set of data on institutional costs, programme characteristics, and student outcomes (Dougherty & Callender, 2017).

American studies have also found that use of social media and text messaging can be useful in encouraging students to attend college (Castleman & Page, 2015; see also Bergman & Chan, 2017). For example, Castleman and Page (2015) conducted a text messaging experiment involving reaching out to students after high school graduation. The students were sent periodic, automated text messages to remind them of such key steps in matriculation as registering for orientation and placement tests, completing housing forms, and filling out financial aid forms. The text messages also offered help in filling out those financial aid forms and interpreting financial aid award letters and tuition bills from their intended colleges. The measured outcomes were overall enrolment in college, enrolment in two-year colleges, and enrolment in four-year colleges. Across these three different outcomes in four different cities, Castleman and Page found statistically significant results in three of twelve comparisons between experimental groups that received text messages and control groups that did not (Castleman & Page, 2015, p. 154). The impacts were greater for students with no clear higher education plans (4 of 6 comparisons) and those who had not completed the Free Application for Federal Student Aid (1 of 2 comparisons) (Castleman & Page, 2015, p. 156)

Studies have also found benefits to colleges reaching out to students with better information on what college requirements are and how well students are prepared to meet those requirements (Howell, Kurlaender, & Grodsky, 2010; Kurlaender, 2014; but see Foote, Schulkind, & Shapiro, 2015). For example, the California State University system has created the Early Assessment Program to provide high school students in their junior year with information about how well prepared they are for college-level

courses. An evaluation of the programme found that it significantly reduces the number of matriculants who need to take remedial education courses once they get to college (Howell et al., 2010). To incentivise these institutional outreach efforts, it would be useful if the United States were to require higher education institutions to issue Access Agreements similar to those required of English higher education institutions. In these agreements, English institutions state their tuition fee levels, specify the amount and kind of institutional financial aid to be offered, describe the outreach and retention activities that will be undertaken and how much will be spent on them, and set performance targets. The Access Agreements are reviewed by the government and made publicly available. They force institutions to make public commitments to outreach and they allow monitoring of how well institutions are meeting those commitments (Bowes, Thomas, Peck, Moreton, & Birkin, 2013; Dougherty & Callender, 2017; United Kingdom Office for Fair Access, 2016a, 2016b).²³

Once in college students still need help in securing the information they need to make better choices concerning which programmes and courses to take and how to prepare for work or further education (Bailey et al., 2015; Rosenbaum et al., 2006, 2017; Scott-Clayton, 2015). These information needs are particularly complex for American community college students who intend to transfer to four-year colleges. They can make mistakes in major and course choice that can preclude transferring to certain colleges or greatly extend their time to graduation (Dougherty, 1994; Jenkins & Fink, 2015; Wyner et al., 2016). In recent years, an articulated set of proposals has appeared – under the rubric of “guided pathways” – for providing this information to college students. I cover this guided pathways approach below.

A major difficulty with the suggestions above is that they cost money, and governments – particularly American state governments – are reluctant to spend money on college advising (College Board, 2011, pp. 39-40). This is often one of the first budget items to be cut when schools and governments run into financial straits. Another difficulty is that it would be beneficial to have counsellors who often match their students in social class, race, and gender (College Board, 2012, pp. 70, 87). This would reduce the negative impacts noted above of counsellor and teacher prejudice on students’ educational expectations and achievements. However, recruiting such a diverse counsellor workforce is difficult and, again, expensive.

Reducing the costs of suboptimal choices

Even when provided with better information, students will still make suboptimal choices. The task then is to be able to quickly spot those mistakes and lessen their negative impact (Bailey et al., 2015; Rosenbaum et al., 2006, 2017; Thaler et al., 2013). Electronically based degree-audit systems can continuously track student progress on their educational plans and provide suggestions on courses to take the following

semester that are consonant with those plans. When the students reach certain cross points or go off course, a degree-audit system can prompt students and advisers to meet (Bailey et al., 2015; Jenkins et al., 2017; Rosenbaum et al., 2017; Wyner et al., 2016). Furthermore, college credentials can be erected in a stackable form – in which certificates of a year or less, two-year associates degrees, and four-year bachelor’s degrees each feed into each other – so that if students decide to stop short of their goal, they at least get a credential that has some labour market value and can be applied in time to the next higher degree (Bailey & Belfield, 2017; Rosenbaum et al., 2006, 2017).²⁴

Though much can be done to improve information provision, it can go only so far to reduce socially stratified mistaken choices. It is also important to consider how to make choices less numerous and complex to begin with, aiding both students and their advisers.

Reducing the number and complexity of choices: improving choice architecture

One of the paradoxes of choice is that people typically want more choices but this can actually make them less able to choose well. Many studies in cognitive psychology and behavioural economics find that people are less able to make a choice if the choice options are numerous or if the attributes of those options vary along multiple dimensions. Would-be choosers often end up deferring choice even when not deciding has negative consequences, staying with their current situation, making the choice that involves the least effort, or making haphazard choices (Botti & Iyengar, 2006; Carroll, White, & Pahl, 2011; Castleman, Baum, & Schwartz, 2015; Chernev, Bockeholt, & Goodman, 2015; Diamond et al., 2014; Iyengar, Jiang, & Huberman, 2004; Iyengar & Lepper, 2002; Kahneman, 2011; Schwartz, 2000; Scott-Clayton, 2015; Thaler & Sunstein, 2008).²⁵

Such cases of cognitive overload often crop up in educational decisionmaking. Studies of student decisionmaking about college have noted how the number and complexity of choice alternatives, particularly in community colleges, undercuts students’ ability to make effective choices about which courses to take, financial aid to pursue and accept, and paths to take through higher education (Bailey et al., 2015; Castleman et al., 2015; Rosenbaum et al., 2006, 2017; Scott-Clayton, 2013, 2015).²⁶

A variety of scholars and policymakers have converged on the idea of consciously reshaping the “architecture of choice” in order to make it easier for students to make college choices that benefit them. Crucial to such architecture is reducing the number of choices, providing structures that nudge students toward the right choices, and building in supportive defaults if students fail to make a choice (Thaler & Sunstein,

2008; Thaler et al., 2013; see also Bailey et al., 2015; Rosenbaum et al., 2006, 2017; Scott-Clayton, 2015). This advice has been reflected in the various proposals for what has come to be called the “guided pathways” approach to reducing cognitive complexity for students as they make choices within higher education (Bailey et al., 2015; Dougherty et al., 2017; Jenkins et al., 2017; Karp, 2013; Rosenbaum et al., 2006, 2017).

The “guided pathways” approach involves restricting and structurally guiding the number of big choices students make. Soon after entering college, students are pushed to develop an educational plan that maps out each step through graduation. This plan is customised for each student based on their prior credits, degree goals, and timeline to completion, and it is ideally stored in the college’s student information system, so that it is easily accessible to students, advisors, and faculty. To guide student choice, individual majors are bundled into broad “metamajors” such as health or business that students initially select. If a student is not yet ready to select a particular major within a metamajor, each metamajor has a default curriculum that provides exposure to the breadth of the metamajor and lays the basis for later selecting a specific major (Bailey et al., 2015; Dougherty et al., 2017; Jenkins et al., 2017; see also Rosenbaum et al., 2006, 2017). Good defaults are very important because they guard against the tendency of people to make suboptimal choices by failing to make choices, sticking with what they are already doing, or choosing the option that involves the least effort (Thaler et al., 2013).

The guided pathways approach has great promise but it has not yet been subject to rigorous and repeated evaluation (Dougherty et al., 2017). However, preliminary evaluations of various components of this approach are encouraging (Bailey et al., 2015; Jenkins, et al., 2017; Rosenbaum et al., 2017).²⁷

Reducing self- and other blame by demystifying the nature of choice

The recommendations made above will contribute to reducing the tendency of choice to produce and legitimate inequality. By reducing the number, social stratification, and negative impacts of suboptimal choices they will reduce the tendency of less advantaged people to make suboptimal choices for which they blame themselves and are blamed by others. But how do we reduce to begin with the tendency to blame oneself and others for mistakes? This is crucial in order to reduce the tendency of a high-choice social system to legitimate inequality.

Social science research can make a key contribution. By illuminating the socially stratified and stratifying nature of educational choices and the ideological impacts of high-choice regimes, social science research can lessen how people react to suboptimal choices by blaming themselves or others. Instead, their attention can be

directed back to how systems of social inequality produce and obscure subsequent inequality (Lareau, 2011, 2015). This project is in keeping with Pierre Bourdieu's concept of "socioanalysis": helping social actors understand how they misrecognise the actual dynamics of cultural processes and institutions and thus get locked into reproducing patterns of domination (Bourdieu & Wacquant, 1992; Swartz, 1997).

F. Summary and conclusions

This paper draws on research findings in the sociology of education, behavioural economics, and cognitive and social psychology to examine how higher education choice-making reproduces and legitimates social inequality. The paper's central thesis is that a societal regime of many choices – while widely seen as desirable and fair – builds on and extends societal disadvantage but in a way that obscures that process to virtually all who participate in that regime. As the paper argues, the provision of many choices *produces* social inequality. People often make choices that do not serve their interests as well as they might wish, particularly if they are students who are faced with many choices but do not have adequate information. Secondly, the incidence of those suboptimal choices is not random but is socially stratified. It is higher for less advantaged people, and societal factors – such as the unequal distribution of economic resources, unequal provision of good information, and unequal exposure to discrimination -- play a crucial role in producing those socially stratified suboptimal choices. Finally, the provision of many choices *legitimates* social inequality. The more one thinks in terms of choices the more one tends to blame the unfortunate, including oneself, for their circumstances. Seemingly offered many choices in life, both the winners and losers in society come to feel that much of the inequality they experience is due to their own actions and therefore is legitimate.

The paper explores various means that could be used to reduce the social stratification of educational choice-making. One is to provide more and better information in more equal ways through better advising and other means. However, students will still make mistakes, so we should also move to reduce the impacts of bad choices by such means as better tracking of students' progress into and through higher education and, as needed, intervening to help students get back on track. Third, more structural intervention is also in order. We need to create a "choice architecture" -- such as the guided pathways reform project in higher education -- that reduces the number of fateful choices students have to make and structurally nudges students toward making good choices. Finally, and most sweepingly, we need to demystify the process of choice-making so that -- even as students continue to be involved in choice-making -- they are aware that it is distorted by structures of inequality and that they should be slow to blame themselves and others for the social stratification it produces.

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Endnotes

¹ Intrinsic motivation is the pursuit of an activity for the inherent satisfaction the activity itself provides. Deeply internalised extrinsic motivation involves the pursuit of an activity for some separable outcome, where that outcome has come to be valued by the person pursuing of the activity and is not due just to external rewards and sanctions or feelings of shame or guilt (Ryan & Deci, 2000, pp. 71-73).

² This emphasis on independence and individualism as versus interdependence is more pronounced among middle class than working class Americans (Kusserow, 2012; Stephens, Fryberg, & Markus, 2012; Markus & Schwartz, 2010).

³ But there is important variation in this. Disadvantaged African-Americans are less likely than similarly placed whites to attribute their disadvantage to their own actions as versus external forces (Shepelak, 1987).

⁴ A new reaction may be emerging, however. There is a growing tendency among conservatives to attack the highly educated as a cultural elite and to reject the value of higher education, both societally and individually (Pew Research Center, 2017). This emerging reaction may undercut the tendency to blame oneself for a low level of education.

⁵ The priming took the form of unscrambling 20 sentences that involved meritocratic statements e.g. “effort leads to prosperity” (McCoy & Major, 2007).

⁶ Male subjects in the experimental group were more likely than control-group men to characterise as discriminatory their rejection for a job by a woman supervisor (McCoy & Major, 2007).

⁷ There is evidence that this tendency of choice situations to lead to blaming the unfortunate and be unwilling to redistribute resources to them is stronger for those who have right-wing political affiliations (Cappelen, Fest, Sorensen, & Tungodden, 2013, p. 7).

⁸ The concept of undermatching resembles the concept of “talent loss” that was prevalent in the 1960s (Holland & Astin, 1962).

⁹ This is to be distinguished from a “below standard” curriculum on the downside and a “moderately rigorous” or “rigorous” curriculum on the other side. To be classified as carrying a standard curriculum in high school, students must earn 4 credits in English and 3 credits each in social studies, math, and science (Chen et al., 2017, Table C-4a).

¹⁰ Before moving on we should note that students who are high in ability but poor in economic resources may not always do well at highly selective colleges for one or another reason. Still, it is important to underscore that repeated studies find that – all other things being equal – students attending selective colleges are more likely to graduate and do better in the labour market than students attending less selective colleges. Even if less advantaged students do less well at selective colleges than their more economically advantaged academic peers, they still graduate at higher rates than do comparable students who go to less selective colleges (Bowen & Bok, 1998; Bowen et al., 2000; Kurlaender & Grodsky, 2013; Light & Strayer, 2000).

¹¹ As can be seen, there is virtually no white-Black difference in educational expectations. Moreover, when SES is controlled, Black students have higher educational expectations than comparable whites (Hossler, Schmit, & Vesper, 2009, p. 26; Massey, Charles, Lundy, & Fischer, 2003, p. 10).

¹² Bourdieu’s concept is similar to what others call tacit knowledge or practical consciousness (Hodkinson & Sparkes, 1997; Williams, 1995).

¹³ These impacts differ by type of aid, however. Certain state merit aid programmes have been found to *reduce* graduation rates by diverting students from more selective to less selective state institutions (Cohodes & Goodman, 2014).

¹⁴ Pell Grants are an exception. The provision of Pell Grants has proved to have much smaller impacts than expected (Dynarski & Scott-Clayton, 2013, p. 81; Long, 2008, pp. 16-17). A major possible cause is the fact that, to receive the Pell Grant, students must file the Free Application for Federal Student Aid (FAFSA), which comes late in the college-application process and has been notoriously difficult to fill out (Dynarski & Scott-Clayton, 2013; Long, 2008; Scott-Clayton, 2017).

¹⁵ Devine (2004) notes the importance of putting these findings in a temporal context. In the good economic times of the 1950s through early 1970s, a good number of lower middle class working class families were able to secure jobs that provided stable economic resources that allowed them their children an approximation of the option of longer-term higher education planning enjoyed by more affluent

families. But in slowly growing and more unstable economy of the last thirty years, this working-class option has eroded and an increasing number of middle class families are now facing economic resource constraints that are restricting the educational plans of their children.

¹⁶ Similarly, in the UK, students from more working-class schools are more likely to have a mistaken awareness of how higher education institutions are ranked in the Times Universities League Table (Ball et al., 2002).

¹⁷ Multivariate studies have found that access to advanced academic courses – such as Advanced Placement and college-high school dual enrolment courses – is associated with higher rates of college going and attendance of four-year colleges (Speroni, 2011).

¹⁸ With regard to proposals for equalizing and improving financial aid, see College Board (2008), Goldrick-Rab (2016), Reimherr, Harmon, Strawn, Choitz (2013), and Scott-Clayton (2017). With regard to proposals for improving academic preparation, see ACT (2008), Perna (2005, 2013), and Rothman (2011).

¹⁹ See Kelly and Schneider (2011) for evidence that the impact of information provision is more pronounced for parents with below average incomes, lower education, and less information about college initially (Kelly & Schneider, 2011).

²⁰ High achieving was defined as being in the top decile of either the SAT or ACT. Low income was defined as being in the bottom third of families in income (Hoxby & Turner, 2013: 13-15).

²¹ The application guidance involved information on steps to be taken (taking college assessments on schedule; obtaining letters of reference; completing the FAFSA; comparing colleges on the basis of curricula, instructional, and graduation rates). The net cost information concerned how financial aid works and what are net costs for low to middle income students at an array of colleges in a student's state and locality. The fee-waiver assistance involved providing students with paperwork to apply for waiver of the application fee at 17 selective colleges (Hoxby & Turner, 2013, pp. 8-11).

²² Such an expansion of college-outreach programmes should be mindful of the fact that those programmes differ in their apparent success and need more careful evaluation. For example, methodologically sophisticated studies of the federal TRIO programmes are not abundant and so far have found rather uneven effects (Cahalan, 2013; Domina, 2009; Haskins & Rouse, 2013).

²³ The impact of Access Agreements is not certain. However, there is evidence that English higher education institutions have modified their outreach efforts in response to the demands of producing their Access Agreements. Moreover, institutions report that the use of Access Agreements has helped raise the profile and status of widening participation efforts within their institutions, has led them to put a greater priority on improving achievement and success among under-represented groups, and has driven the development of better systems for measuring the impact of their widening participation efforts (Bowes et al., 2013b; UK Office for Fair Access, 2016; see also Dougherty & Callender, 2017).

²⁴ The idea of stackable credentials has great face validity. However, preliminary evaluations do not yet indicate that they purchase students any particular advantage (Bailey & Belfield, 2017).

²⁵ For example, as the number of 401k retirement-fund options increase, the percentage of employees who opt for one decreases (Botti & Iyengar, 2006). And even when people do make choices in the context of many and complex options, they often make sub-optimal choices, focusing on a restricted set of factors and ignoring other potentially important ones (Botti & Iyengar, 2006; Hanoch, Rice, Cummings, & Wood, 2009; Lavecchia et al., 2014; Tanius, Wood, Hanoch, & Rice, 2009). For example, as the number of 401k options rises, employees allocate a smaller proportion of their 401k contributions to equity funds as versus lower return money market and bond funds (Botti & Iyengar, 2006).

²⁶ A survey of users of the Unistats college-advising website in England found that users often reported being overwhelmed by too much data (Diamond et al., 2014).

²⁷ Evaluations of the new Guttman Community College of the City University of New York— which has implemented many of the principles of the reform agenda— have found positive results (Bailey et al., 2015; Jenkins et al., 2017; Rosenbaum et al., 2017).

Centre for Global Higher Education
UCL Institute of Education
London WC1H 0AL

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