

THE BROOKINGS INSTITUTION

FALK AUDITORIUM

MAKING COLLEGE WORK:

PATHWAYS TO SUCCESS FOR DISADVANTAGED STUDENTS

Washington, D.C.

Wednesday, September 20, 2017

**Welcome and Introductions:**

RON HASKINS  
Cabot Family Chair, The Brookings Institution

**Overview:**

HARRY J. HOLZER  
John LaFarge, Jr., SJ Professor of Public Policy, Georgetown University  
Nonresident Senior Fellow, The Brookings Institution

SANDY BAUM  
Fellow  
Urban Institute

**Comments and Discussion:**

RICHARD REEVES, Moderator  
Senior Fellow and Co-Director, Center on Children and Families  
The Brookings Institution

DAVID BAIME  
Senior Vice President for Government Relations and Policy Analysis  
American Association of Community Colleges

LASHAWN RICHBURG-HAYES  
Vice President, Education  
Insight Policy Research

\* \* \* \* \*

## P R O C E E D I N G S

MR. HASKINS: Welcome to Brookings. My name is Ron Haskins along with Richard Reeves, the esteemed Richard Reeves. We directors of a center here called a Center on Children and Families and we're pleased to be sponsoring this event to bring attention to a new book, "Making College Work", by Harry Holzer and Sandy Baum.

Sandy's a fellow at the Urban Institute and professor of merit of economics at Skidmore College. Harry is a LaFarge SI -- what TPARG S I something.

MR. HOLZER: S.J.

MR. HASKINS: S.J., what is S.J.?

MR. HOLZER: Society of Jesus, Jesuits.

MR. HASKINS: So he's LaFarge, Jesuit professor at McCourt School of Public Policy Georgetown. He's also a non-resident fellow here at Brookings, and both are distinguished students of postsecondary education with long record of study and publication, including wonderful documents about the price of college and tuition and so forth that Sandy has been doing for many years.

After Harry and Sandy provide us with an overview of the book, my colleague, Richard Reeves, will try to stump them by asking amazingly penetrating questions and befuddling them.

Then we're fortunate to have two reactants who are highly qualified to hold forth on how to improve postsecondary education, Lashawn Richburg-Hayes, formerly a senior researcher of MDRC, now leads education work at the Insight Policy Research in Arlington.

We'll also hear from David Baime, senior vice president for government relations and policy analysis for the American Association of Community Colleges.

After we hear from Lashawn and David, Richard will question again and moderate a discussion among all four speakers, hopefully lively and interesting, and then we'll give the audience a chance to ask questions of the speakers.

So we're pleased to sponsor this event to announce an important book that has public policy implications, and this sort of thing is bread and butter of our center at Brookings to sponsor a

discussion of the strikingly original book that proposes solutions to a major social problem faced by the nation.

So with that, Harry and Sandy.

MR. HOLZER: So for those of you who are fans of professional wrestling, Sandy and I are going to be a tag team on this going back and forth -- no body slams or any of that, but so --

MS. BAUM: Promise. So thank you all for coming. We're really excited to have the chance today to talk about the issues in our book, which focus on educational outcomes for disadvantaged students.

We're going to talk about what happens to students in college and after college, and we're very much focused on the students who come from low income backgrounds, from first generation students, that, of course, disproportionately includes a lot of black and Hispanic students and a lot of older students.

I want to say a couple words about why we wrote this book, and I think -- if you think about the context of the conversation about college and the number of people who are asking if college is worth it, we -- probably most people in this room agree college is very worth it and it gets frustrating to listen to that conversation, but it's increasingly clear that the variation in outcomes is very significant.

In fact, the group on which we're focused has outcomes that are not nearly as satisfactorily as the outcomes of those people you see on the front page of The New York Times who have a bachelor degree and might work at Starbucks for six months.

So we want to focus on these students and how can we make their lives better, both before college, during college, and after college. So we decided that we should put our different expertises together.

Harry is a labor economist. He thinks a lot about the workforce. I'm a higher education economist. We actually met working on a project about Pell Grants where he crossed the line over to my world and we became increasingly aware of how the intersection of these issues is important and we need to talk to each other more and the fruit of it is this book.

So we're talking about what the problems are, the problems that students don't go to

college in enough numbers, they don't graduate. When they're there, they don't study the right things to get credentials of value.

So we want to ask what causes these problems and what solutions might be most beneficial, and we're focused on lack of resources both at the institutional level and the state level on the incentives that students and institutions face and on being realistic about what the options for what we can do within a context of higher education to solve these problems.

It's a challenge. We want to grapple with some of the hard questions where we have to actually make choices about what is going to be best for these students.

So we're going to talk about all of these problems a little bit, frame the problems a little bit, and then talk about solutions. Again, we focus on the students and the institutions, on the problems in both areas and on the solutions in both areas. A big part of the problem obviously is financing and resources, and we're going to talk a little bit about student debt, but that's not a problem in isolation. It's a problem primarily, because of students not successfully completing degrees of value in the labor market.

MR. HOLZER: So of those three problems listed on the last slide, I'm going to show you some numbers on the first two to convince you that there are problems there.

So this is from a national survey of beginning college students. We're looking at completion rates. As you can see, the blue is completion of bachelor degree, light blue is associate degrees, very light blue is certificates, and then the two groups of non-completers, one of whom is still (inaudible) enrolled and the other is not enrolled.

We have four groups. This is only for dependent students still living with or under family's income. They're roughly in quartiles. The top quartile is the high group, bottom quartile is the lowest income group, and the numbers jump out at you. There's very, very different completion rates. Certainly bachelor degree, very high gaps and of anything.

So the bottom group, 55 percent after six years have nothing to show, no credential of any kind, and the top group, that's only 30 percent. So the gaps are very wide by income.

Now, you might be saying to yourself, well, of course, these students bring very different characteristics and there's big achievement gaps that we've heard a lot about.

Even when you look within achievement group, like by GPA we've sliced up the sample, you do see a pattern like this. The gaps are not quite as big (inaudible) control for achievement, but they're still there and especially -- especially for the middle achievers, the gaps can be strikingly high.

Well, Sandy said there's a lot of older students, we often call nontraditional students, going to college these days, often going back, so we have four different age groups here.

Again, as the numbers go up, the ages get higher. This is not well known. Older students have much, much lower probability of completing relative to the bottom group, the group coming right out of high school.

Now, this is definitely not based on achievement. If you look at, for instance, grades in college, the older groups do as well or even slightly better than young groups. They're serious, they're focused, other things in their lives presumably, like working to support their families are often keeping them -- so that's a group with a different set of problems that we also need to address.

Then finally this is the set of numbers by the starting institution that people go to, their first -- people do transfer sometimes. Sandy will talk about transfers, but where they start. So these are real completion rates, conditional on starting at a community college, do you get an associate degree or transfer to get a bachelor degree.

The bottom four rows are different kinds of four-year institutions, public -- the first two are public, the bottom two are private, and then whether or not they're doctorate granting institutions as a measure of are they a research university or not. Just within those four-year institutions, the variance is very high.

Like if you go to a public non-doctorate granting institution, completion rates are less than half. Whereas the best group, the doctorate-granting privates, the probability of completing is three quarters. Then if you look at the most elite schools, those are over 90 percent. If you look at the lowest tier public schools, they're going to be considerably below 47 percent. So even within the four-year schools, there's a lot of variation.

But then when you get to the public two years, the community colleges that's the third row up there, the for profit schools, where a lot of disadvantaged students go these days, are the second

row, the numbers are actually much worse than any of the four years.

So for community colleges, a lot of the students do transfer. About 12 percent of the total sample will end up with a B.A. In some recent data, it's as high as 14 percent, but it's in that range. Only about 14 percent actually get an A.A., so only a quarter of the students who started community college get a degree.

If you add in certificates, that goes up to 35 percent, a third rather than a quarter. At the for profits, much fewer people get degrees, a lot more of them get certificates. So the outcomes overall for both groups are not very good and here's the real punchline -- low income students, disadvantaged students, first generation students are heavily concentrated at those institutions with the weak outcomes, at the for profits, because they market that group heavily at the two year -- public two years and at the lowest tier of public four years. So these students are going to places which have bad track records.

Now, again, at this point it's natural to say, well, is it the characteristics that the students bring or is it the institutions. Some very good research has been done on this by John Bound and his coauthors and other folks who suggest it's a mix of the two.

Anyone with a given level of achievement when they go to a better institution, their outcomes are generally better. Part of the problem is even high achieving students, not that there's so many of them in the low income group, but some, they often go to these bad institutions as well, simply because they have very little information and little access to the better places. So it's partly about the students and partly about the institutions.

Then let's get to the second question of our three: What are students studying and are they taking things that have market value when they finish and go back in the labor market. So this is from our national data, what students are studying at public community colleges.

So first of all, you can see over in the left-hand side about a quarter never declare a major, maybe they're not making enough progress there to declare a major.

The third bar, humanities and social sciences is another group for which is not a lot -- if that's what you bring to the market as a completed terminal, associate degree, there's not a lot of demand there, and this other group are pretty mixed categories as well.

So if you add together those three groups, over 40 percent of students at community colleges either don't have a major or aren't majoring in something that the market seems to value.

Different states do this differently and I have data -- I've studied data from Florida a lot. Florida everybody is picked to pick -- pushed to pick a major fairly quickly. What you see there is almost nobody is undeclared, but huge numbers of people in these humanities, like liberal studies and general studies, and not a lot of value there when you go to the market.

So these are the data from the labor market within the first five years and these numbers are from linear regressions that control for achievement and all that kind of stuff, so they really are pretty close to a market return.

Well, people with graduate degrees in the far left, people with B.A.s, those numbers -- and those are roughly percent increases relative to high school graduates in the first five years. No big surprises there.

I think the three sub B.A. categories I think are a little bit surprising. Number one, notice that this fourth column, associates in science or associates in applied science, the return to that is double, the return to an associate in arts. So right away there's huge variation in the associate degrees, and the more technical ones are much better.

Associates in arts on average in Florida just give you a return of what the average certificate gives you. Again, in Florida a lot of the certificates are credit based, but on average that's as good an investment.

Then when you look within that A.A. category as we've done, even there there's a lot of variation. The occupational A.A.s in business and things like that have the bigger return. But having a terminal degree in humanities, an A.A. humanities like liberal studies, generates almost no market return at all. That's where we see large numbers of people end up.

So bottom line, these two, a lot of students aren't finishing, especially disadvantaged students, and a lot of them are studying things that the market tends to not reward.

MS. BAUM: So one of the problems that may explain a significant amount of why students are not completing or why it takes them a long time to complete has to do with finances,

finances on this student level in addition to the institutional level.

So we talk a lot about tuition prices, but for the students at community colleges that we're talking about, tuition is not really the main issue. Because these disadvantaged students, if you come from a low income background or you're a low income adult, your federal and state grant aid are quite likely to cover the tuition, even if you're not in one of these free tuition zones, cover the tuition at the community college, but that doesn't mean you don't have a lot of other expenses that you have to cover and if you have to work full time, that's a problem.

Now, sort of disturbing number of these disadvantaged students are enrolling in for profit institutions, and the tuition at for profit institutions is about more than three times, four times as high as the tuition in community colleges.

So for those students, actually tuition is a significant problem. Those students accumulate much more debt than students who go to community colleges, although debt in community college is also increasing.

Other problems are not so much about how generous is the student aid system, but, for example, the complexity of the student aid system and the difficulty students have accessing the system is really significant.

I know community colleges are working on this, but at for profit institutions, they all apply for financial aid. And at community colleges, a significant number of people who would be eligible for federal grants are not even applying.

But the biggest cost, of course, of going to college, particularly a community college, is the opportunity cost of your time, that students -- even if you don't borrow, to suggest that borrowing money is the only problem with paying for college is just wrong, because you've put time and energy and you've got foregone earnings and foregone opportunities that you could have pursued if you had not been in college.

So if all you did was throw away three years of your life and not graduate, that's still a big problem. But the longer the time you spend, the higher that cost is, so time to completion becomes very important. We know not everyone can enroll full time, but students who are always part time have really,



really low completion rates. So the completion rates that you see up there, mix the full time and the part time, and the gap is really, really large.

So student debt for associate degree holders is very different. Most of the conversation about student debt is bachelor degree recipients, and these are the people who seem to generate the most public sympathy. But actually the people we should be worried about are the population we're talking about now -- people from disadvantaged backgrounds who don't have a fallback if they have trouble repaying their loans and people who are at risk of either not completing or earning degrees with little labor market value.

So this is a chart that just shows you what has happened over time to the debt levels of associate degree recipients. Now, these are the people who complete their associate degrees.

If you look at the bottom three rows, that's all associate degree recipients, you can see that the percentage who did not -- who managed not to borrow was 63 percent in 2003, '04, and they fall into 50 percent by 2011, '12. The other end of those rows, the percentage who graduated with \$30,000 or more in debt, was only one percent in 2003, '04 and had (inaudible) significantly to still the low rate of eight percent in 2011, '12.

But if you look at the two sections of the table, the top section is for profit institutions and the second section is public two-year institutions. You can see not the whole story, but a significant part of the story of what's driving this has to do with the switch in where these degrees come from.

So in 2003, '04, seven percent of them came from the for profit sector and by 2011, '12, that was 14 percent. There 28 percent of the associate degree recipients had borrowed \$30,000 or more, whereas there were virtually none of those either in 2003, '04.

So there was an increase in community colleges from one percent to four percent, that's obviously in percentage terms a big increase, but it's not the big part of the story.

If you look at default fall rates on loans, the default rate is actually higher, somewhat higher, for community college students than for profit students, but, again -- so it's a problem. I don't want to suggest it's not a problem, but it represents a much smaller share of the community college students than it does of the for profit students.

So we want to think about these students and what is causing the problems that are leading to these outcomes that are not satisfactory, and we're going to talk -- I'm going to talk a little bit about the student circumstances and then Harry is going to talk about the institutions.

It's obviously a combination of factors and we talk a lot in detail in the book about this, but part of the issue is clearly low levels of high school achievement and academic preparation. We're not going to solve this problem without doing something about what goes on before students get to college, what goes on in early childhood, what goes on in K-12.

Even controlling for academic achievement, the outcomes are still very different by income levels. So this is not the whole story, but it is a very important part of the story.

Financial barriers obviously make a big difference, but, again, the financial barriers are not going to be solved by just doing away with tuition. Because at a community college about 20 percent of your budget is your tuition and fees even before you get financial aid. So figuring out how people can successfully live and work at the same time is a huge barrier that we have to figure out how to overcome.

Another big issue is like why are these students choosing to go to institutions that aren't going to serve them well or to major in fields that aren't going to serve them well.

A huge part of the problem is that they don't have the information, they don't have access, they don't have information, they don't have options, they don't have resources, they don't have what we call social capital. No one -- they don't have parents at home who went to college and can tell them, they don't have parents who have been terrifically successful in the labor market or they wouldn't be from such low income families.

We don't help them very much before they make their choices and we don't help them very much as they're making choices along the way. And recognizing that we can't just hand people money, that we have to give them strong support is a critical part of solving this problem.

We just see that students are enrolling in institutions where in many cases you could predict that this is not going to work out well. For some of them, it's not the right time to enroll. For some of them it's the wrong institution, for some of them it's just the wrong program. But in many cases, we could predict and those are the easiest problems to solve. We should be able to solve that problem. We

can't predict everything that's going to happen to people, although life events that are going to intervene while they are trying to complete their degrees. But we really want to -- it's really important to focus on both the financial barriers and the barriers that have accumulated before college and that people experience while they are in college.

One of the really I think most complicated issues is the transfer issue. So as Harry mentioned, we have 12 to 14 percent of these students who started community colleges end up managing to get bachelor degrees.

If you ask them when they enroll, about 80 percent say they're planning to transfer and go to a four-year institution. So those plans never actually materialize and they don't succeed in doing that.

So this creates a huge problem, because then they end up with, if they're lucky, an associate degree that has little labor market value, right.

So when they start out, we really want people to keep all the doors open. We don't want to say to people chances are it's not going to work out that way, you should make sure along the way that you get a credential that will have value even if you don't manage to transfer and earn a bachelor degree.

We hesitate to say those things, but the two paths can be conflicting. Because if you're looking for the credits that will transfer best, you're going to want the credits that you would get in a general program in a four-year college. But if you do that, then you're not going to be prepared.

So we have to figure out how to acknowledge the reality that most of these students are not going to transfer and earn bachelor degrees. We have to prepare them for the labor market, balancing their short term and long-term opportunities.

Let me just say that we are not saying we don't value the humanities and social sciences. I get very worried about people saying the only reason people should go to college is to get a job, of course not. But we must make sure that these people in addition to getting a general strong education that will serve them well over time are prepared quickly to make some money, because otherwise they're never going to be able to realize their aspirations.

MR. HOLZER: So Sandy talked about some of the difficulties that the students bring to

higher ed --

MS. BAUM: I just have to tell you I put up a slide that is still part of what I was talking about.

MR. HOLZER: So I want to talk a little bit about the institutions, as we said the institutions at which the disadvantaged students are pretty highly concentrated.

The first four bullet points have to do with the public community colleges and it comes down to too few resources, but too few incentives to spend the resources well, too little guidance, too little structure, sort of channeling them and helping them make the transitions they need to make, so just a word on each of them. Community colleges get too few resources, especially given that their student body is so disadvantaged and so in need of services.

Quick slide here. This is sort of the different sources of revenue per full time study equivalent at different years. So the second and the third columns are public resources. For students at the public four years and the two years, total revenue is the fourth column and then revenues from state and local in the fifth column.

There's only two stories here. Number one, over time at both levels, the revenues are declining -- the public revenues are declining at both the state level and the federal level and there's a story about why that's going on. But the other story we want to emphasize here is to compare the levels for public two year to public four year. The levels of aid at the public tiers are much lower.

If you add together the second and third column for total public resources, you get, bottom row, about \$6,500 for two-year students and about \$14,000 per student in the four years, more than double.

Now, you might say, well, of course those are research institutions with much higher expenses. A lot of them are not research institutions. A lot of them are the lower tier schools and yet they get many, many more resources per student. So too few resources is definitely a problem.

However, the incentives to spend the money well are also very weak. Remember the subsidies and the tuition levels the schools get, they get them regardless of whether students complete anything and regardless of whether there's any market value when they complete something.

So the incentives -- so there's no reward for trying to do a better job, either on completion or labor market. If anything, the cost of going the labor market route are higher, because a lot of these more technical programs that we see the labor market does reward, they're much more expensive. Equipment costs are very high, instructor costs are often very high.

Again, instructors on staff either don't want to teach that stuff or aren't equipped, up to date, so you have to hire adjuncts from industry, engineers from Ford to teach machining, et cetera, and that all adds to the cost.

Then the students get very little guidance, very little academic guidance or career guidance, and very little structure to the institution. Tom Bailey (ph) at Columbia, who is one of the premier community college scholars in the country, he and a couple coauthors wrote a book a few years ago called, Redesigning Community Colleges. Their punchline was, there's so little structure and they compare it to a cafeteria, where a student grabs a tray and kind of wonders aimlessly grabbing stuff off the shelf, which also does not help them make good choices and help them make the transitions.

So all of those are problems with the public schools, and then the for profit side you have a whole different set of issues. On the for profit side, as Sandy said, the costs are much higher, students pile up much more debt, if anything the outcomes are worse, the completion rates are lower, what they get has much less value. So overall the for profits also need attention. There's a different set of issues there.

Time is running low, so we're going to get to our solutions right now. I'm going to talk about the institutional solutions, and Sandy will then come back to supports aimed at students.

There are some very positive models that are at least promising if not proven. One of them is called sector base training, that's really what's often called the workforce program. It's more on the certificate side, than the degree side. Although, in many places the certificates can now stack to associate degrees.

There's a lot of good rigorous studies with random assignment models showing that the sector-based programs can be very successful and have very good impact. In the whole job training literature, that's the most successful stuff. Now the challenge is replicating those really good models and

scaling them around the country.

The other model on which there's less evidence, the guide to pathway models, comes out of Tom Bailey's work, this idea of building more structure and more guidance so people can make better choices how do they advance.

Well, what's it going to take to expand those two models in community colleges around the country, or even the lower tier four years? Number one they need more resources, but number two they need better incentives. I would -- if we provide more resources, I would target them very carefully on expanding teaching capacity in the high demand fields or the services that Sandy will talk about that help students get there. I would strengthen the incentives external accountability as often provided by the states. It's called outcomes-based funding or performance-based funding. A lot of states are moving in that direction, but you can do it badly and create a lot of unintended consequences.

We would like to see those incentives be based on subsequent student earnings, not just on completion rates or credit obtainment and subsequent earnings for the students we care about the most, the disadvantaged students, the first generation students. So these places would be rewarded for taking care of these students who need the most help.

Internal funding can also improve the incentives like letting the high demand places keep more of the revenue than the institution. That will create incentives to sort of meet the market test as well.

One more thing, on the for profits, we think the regulation is very important. There's actually a very good policy brief that came out of Brookings about a month ago by Stephanie Cellini (ph), a bunch of her coauthors making the case that the regs implemented in the Obama years are really important in the for profit sector to keep from having these terrible outcomes, but of course politically it's a powerful sector and it's hard to keep them.

Then there's a whole bunch of other innovations and higher ed, MOOCs, competency-based credentials, there we just need more evidence on what -- the evidence to date on MOOCs not very promising. We need more experimentation of these innovations and more evaluation.

One more thing and I hand it back to Sandy. We think there has to be more --

MS. BAUM: We're done.

MR. HOLZER: Really quick.

-- more alternative pathways starting in high school for students who either aren't ready for college or aren't inclined a wider set of strong pathways, work base learning, apprenticeships, et cetera are important.

MS. BAUM: So I will not go into solutions, because I know we don't have anymore time, but let me just reiterate that in terms of what we need to do for students, they need more money but they need so much more than more money. So we need to reform the student aid system, but we need to focus really on the services and the guidance that we give them.

Broadly what we want to say is there's not going to be one solution. We need a lot of solutions. We need a big dose of realism. We need to meet students where they are, we need to recognize that not all doors are still open to people by the time they get to college, and we need to help them have the best outcomes possible given their current circumstances. Thanks.

(Applause.)

MR. REEVES: Thank you, Sandy. Thank you, Harry. I'm Richard Reeves. As Ron said, I'm codirector of the Center on Children and Families, which is cohosting -- hosting today's event.

I'm just going to ask a few questions and maybe there will be a chance to extend some of the comments you weren't able to make and then we'll bring on our panelists and then open it up more broadly.

I'd like to add my welcome to those not only in the room, but those who are watching online. We have hundreds of people who are watching this via webcast, 50 percent of whom are currently wearing pajamas. You think you're just watching us.

(Laughter)

MR. REEVES: We're as grateful to you as to the people in the room. Well, not really, because they actually came, got dressed, showered.

First off, I want to congratulate Sandy and Harry on this book. It is unusual in that it is three things -- it's comprehensive, it's authoritative, and it's important. It's relatively unusual to find a book

that takes all of those boxes, so thank you for your contributions to this field.

It's going to be a book I think a lot of us are going to pulling off our shelves a lot and referring back to, so I think it's a really genuine contribution, so thank you.

I think the kind of broad story is the system kind of works okay for people who are either reasonably affluent backgrounds and/or reasonably well prepared. It is these disadvantaged students that is not working. It's in that spirit that I'm going to push you on a couple of points.

I'm actually going to start, Sandy, this question you wrestled with a bit and it's running through your book. I'll put it bluntly. It's the tension between tracking and openness to all futures. That comes out in your section both on CTE and high schools and this really interesting issue about what we're doing with those who enter community colleges and those debt figures and the returns figures and your very strong story about getting a liberal arts or humanities qualification from a community college not being the way to go.

Here's what you say right toward the end of the book, which is one of your strongest lines, you say that pointing people in less ambitious but more promising directions is the best way to improve their perspective and, quote, it is actually, quote, irresponsible not to do so. You said, irresponsible not to do so.

Yet we don't want to seem to be saying, well, look, let's be honest, you're not really college material, so why don't you do a vocational degree. But you, you look like college material, so, yeah, you stay on that track. That's a fundamental problem with any of these systems that try to promote the value of these alternative tracks.

So I'm going to push you on that. How do you do that, how do you say to a kid, I'm really sorry, your GPA is not great, your preparation is not great, why don't you do a vocational degree, but that kid next to you who's probably from an affluent background, who may more likely be white, just because of way things -- yeah, we think you're -- how do we handle that?

MS. BAUM: Yeah, it's a huge problem. If I actually knew the answer to that question, it would be -- I would be in a different place. But I do think that what we've done is err in the direction of not helping people to be realistic.



So I was just reading an article this morning about in Wisconsin they're requiring all high school students to do some sort of career training and so on and think about what they're most suited for and there was tension in that article, because they started saying, education, the purpose of it is just to get a job and we should -- of course this is not true.

Everyone should -- and we talk about this in the CD chapter. Everyone should have a high school education that allows them to understand the way the world works, to learn something about what the work world is like. It's not going to hurt anybody who's going to go off to an elite college to have spent some time in a workplace learning about the work environment that most people face.

So I think that that's one thing is that we have to combine that for everyone, but the reality is -- I mean, I can't avoid the question about at what point can you say to somebody, for you, it's probably not going to work out.

It's one thing to say you have to do this, you cannot do something else. It's another thing to make sure that people have all the information they need and understand what happens to most people who have their characteristics if they go a certain direction.

Because no matter what you do, you're closing off doors. We ignore the fact that when students go and -- if they have a three percent chance of earning a bachelor degree and they go off to a -- either study liberal arts at a community college thinking they're going to transfer, they go to a four year, and most -- the vast majority of them end up without that, they have closed doors.

We don't think of it as that as closing doors, so we need to think about those options as closing doors, we need better guidance, better realism. We have to acknowledge that by the time you're 18 or 20 or 25, you are in different circumstances and that it might not be your fault and it might not be because of your innate characteristics. I think we have to be tough about it a little bit.

MR. REEVES: So at some point you have to start getting more realistic and you think 18 is appropriate? I mean, in Germany they do it at 12.

MS. BAUM: I don't want to tell anybody they can't do this. If you get accepted to a college, you can go. I just want them to be able to make more informed decisions.

MR. HOLZER: Sandy said everything that -- all of which I agree. This whole issue of

tracking, which is why we let voc ed languish for so many years, now it has drifted up to the community college level.

I spoke to the provost of one of the largest community colleges in the country. He said, my students don't want to be technicians, they want to be professionals. Then if you look at the characteristics of that student body, the vast majority of them nowhere near have the credentials, the academic background that's going to enable them.

Again, there's the difference between providing guidance and telling them what to do. You want to try not to cross that line. The other thing again is you want a range of pathways. So even students going to community college who gets stuck in remediation and never leave remediation, because they can't pass -- we think remediation needs a lot of reform.

At the same time, there ought to be other pathways accessible to them, some in the certificate space especially, some for credit, some not for credit, but a range of pathways at which people can still do well if they come to the conclusion that the most academic pathway is not going to be successful.

MR. REEVES: Well, I'm going to build on that, because all of your figures, many of which you've shown for the outcomes of those from community colleges who aren't very well prepared, lead you to what you describe as a troubling question.

When you're reading a book as careful as this, when you say a troubling question, you immediately start reading more carefully. A troubling question is open admissions to community colleges, and you square the circle by saying -- I read it as saying, actually we should rethink that idea and we should think about having admissions requirements, but only when there are good alternatives in place. That seems like a sensible position. I'd like to hear more about that. There is a strong case, given what you just said, to rethink the idea of open admissions, even now, and that might force the correction of alternatives.

I also want to push on whether you entirely agree about that, whether you're in exactly the same place on that question of open admissions. Maybe you do, but if not, I'll find something else to get you to disagree on.

MS. BAUM: Community colleges serve an incredibly important function. And the idea that if you didn't do well in high school, you can't go to college is a terrible idea in the context of our society.

So, of course, we should have options for people who -- people grow up, people change, people have all kinds of things that we need to make sure. So I don't think that either of us intends to say, let's start having test score requirements for getting into community colleges.

That said if you look at the for profit sector and think about this a little bit, there was a point in time when some for profit institutions were being accused of going to homeless shelters and recruiting people to sign on the dotted line and pay. Actually with the threat of regulation, more for profit institutions have started doing things like saying, you have a test period of a few weeks before you pay tuition and before you become a registered student.

What those institutions are saying is we recognize that there are some students who have such a low probability of succeeding that it is really exploitive to have them sign on the dotted line and pay this tuition and so I think we can see it in that sector.

So then think about that in the community college sector and think about -- it doesn't mean you can't come here and take classes. If we can have people taking classes without paying for them and without closing off other avenues of their lives, there are probably ways that we can manage to say there are things that you need to do before you borrow money, before you quit your job, before you change your life and put all your hopes in that basket.

So I think that's different from saying leave open admissions exactly as it is or narrow it. It doesn't mean turn people away. It means create options that recognize the chances that they have and where they can best succeed.

MR. HOLZER: Sorry, we're not going to disagree on this either. These alternatives would probably be in the certificate space for people to come.

If you come to community college let's say out of the bottom quintile or bottom decile of your high school class and they immediately shun you off into developmental aid, odds are your odds are low of actually getting an associate degree, but there are these certificate programs, again some for

credit, some not for credit, some of them actually staffed associates.

So instead of closing the doors, it would be creating these alternatives which have good market value and some students at least might be more successful.

MR. REEVES: You've again teed up my next question, which is about for profits. You identify two main problems -- a completion problem and a value problem. It seems to me the for profits, you have both of those problems, you have -- maybe a debt problem. So if you got those three problems and if you want to see whether all of their worth, you see in for profits and you strongly endorse regulation and continuing with the push that's been around regulation.

But given everything that's in this book, the shorthand I've got for those now is that they're essentially expensive subsidized failure factories. The amount of public money that is being -- that is being spent on these expensive failure factories may call for more than just more regulation.

It's unthinkable. I think in another field of public policy say Medicaid spending or something, that we would allow public dollars to go to institutions that are failing as spectacularly as many of these.

Isn't it time -- I'm not saying this is politically realistic right now. We should defend what we've got, but I want to push you a bit on that.

Isn't there a case of being more aggressive, isn't there a case for questioning public dollars through loan subsidies or Pell Grants going to institutions that are so consistently failing the students they serve?

MS. BAUM: Absolutely. Let me first do the qualification part of it, though. There are public and private nonprofit institutions that don't serve students any better than the average for profit institution, and the same point you're making applies to those institutions.

We should not be supporting students with federal funds to go to institutions that don't serve the vast majority of the students well.

There are some for profit institutions that do very well. In fact, the completion rate for certificate programs is higher at for profit institutions. They do a very good job of some things. You want a short-term certificate and you know exactly what you're doing and they will guide you through it,

whether they have value or not is another question, but they have higher completion rates for the two year -- they give mostly certificates, whereas community colleges give more associate degrees.

I want to make sure we don't paint with such a broad brush. There should absolutely be stricter regulations. It is outrageous that we -- I mean, we're looking at the debt problem and such a huge percentage of the debt problem is that we say, here, take our federal dollars, go off to this institution where we know it's going to be a disaster, but don't worry, we're going to try to forgive your loans afterwards. That's not the solution.

MR. HOLZER: There's one advantage of the for profits, I think. Again, Sandy got it all right. They are more agile in their responsiveness to sort of shifts in the labor market, because they're much less bureaucratic, you don't have to get the faculty buy in and a lot of things at public institutions, so that agility I think helps their certificate programs quickly respond and quickly deliver.

Having said all that, look at the prices they're charging relative to the degrees, that does justify a lot of skepticism at the same time. So I don't want to throw out the baby with the bathwater. We want to keep these institutions and their quick market responses, but again probably more regulation is needed to prevent the really bad outcomes that we'll be seeing in the overall numbers.

MR. REEVES: One of your specific policy recommendations is extending financial aid to those who are studying for certificates, which they don't always get, if I understand correctly.

What's the argument against that? That seems based on your data and the chart you showed on returns to be a no-brainer. If anything, you'd be questioning financial aid for people doing liberal art associate degrees, rather than those doing certificates. You'd flip it, if you were going to -- I'm not going to ask you whether you would take financial aid away. I already pushed you hard enough on that.

What's the argument against extending financial aid to certificates, who -- what's the reasonable argument against you've encountered?

MS. BAUM: It's not certificates, it's noncredit programs. If you go to a community college, at many community colleges it's sort of an arbitrary distinction which ones are for credit and which ones are not, so we're sort of making an arbitrary distinction and who gets it and who doesn't. The

argument -- so it should be more flexible.

The argument against it is we should have learned a lesson from what's happened with student aid and the for profit sector that you open up the student aid system to for profit institutions and they will find ways to exploit it and get as much money as possible.

If you are too loose about noncredit programs or alternative programs or boot camp, whatever it is, and you just say if you do something good, we're going to give you federal aid, you just watch and see what's going to happen to for profit companies who engage in this. We have to be very careful about it.

MR. HOLZER: So this is a place where I'm a little more sympathetic, that argument. Because in the workforce development world, this is an argument that a lot of people do want to see. So allow people to use Pell Grants to get even not for credit credentials that the labor market values. So I think it's worth at least experimenting with.

Having said that, you know the downside is scary. What everyone says in this field is, well, they would have to be industry-recognized credentials. How do you know if they're industry recognized, at the end of the day you'd look at the data on what the market return is.

As many of us in this room know, there's a lot of things you do with data to sort of misrepresent results and present -- so it's not as clear-cut a test as you might think. So I am in favor of that experiment.

Of course the other thing we know that given the political power of some of these private interest, like in the for profit schools, you can see them with any -- if you open the door a little bit, there's at least the possibility of these places barreling in and opening the floodgates. So I think Sandy and I ended up with we want to try this, we want to experiment with it, we want to evaluate it before we embrace it wholeheartedly, but be aware of the pluses as well as the potential downside.

MR. REEVES: One of the things you mentioned, Harry, was the gap in resources that are available to community colleges versus four-year colleges and you point out that it's hard to compare exactly, because they're different kinds of institutions, but nonetheless the gap is so much, so great, but it's hard to imagine there's an unfair differential and that's what you say.

You quote The Century Foundation report on this, which called pretty strongly for Title 10 type funding. Am I getting that right -- yes. Oh, it's Title 1 funding, yes. Thank you. I always get that mixed up. Thank you, David.

Title 1 funding for community colleges, you pull it back a little bit from that. You don't quite as far as them. You make the point there's a resource issue.

Do you think there should be a move to specifically devote more resources to community colleges? And if you had to do that in a relatively revenue neutral way within the sector as a whole, where would you get the money from?

MR. HOLZER: Well, all of us would prefer a world where the resources were greater, right, so it wouldn't be coming out of someone else's pocket in a higher end. Some of our friends a few blocks away in 1 Dupont Circle (inaudible) organization would certainly object to a scheme where total spending is constant and you're -- and you're reallocating.

Now, if we had better incentives on spending the money, huge amounts of money are being wasted, public and private money, among people who don't finish anything. So one thing you can imagine that if there's a more rationale reallocation of that money, completion rates would go up and a lot of the money there would be better spent and that wouldn't call for new resources.

Having said that, when new resources are a problem, I have called for something like a race to the top for higher ed -- for public higher ed where the federal government would inject some new resources into the system with strong accountability attached to it and very targeted, that would be my first choice.

My sense right now is that the feds aren't dying to throw more money into anything like this, so we still will face the tradeoffs.

MR. REEVES: I'm going to just push you a little bit more on that. We're doing a deal, I'm in the White House, I'm saying, okay, I buy it. We do need to give more money to community colleges and a lot of people will do better from that, but I need the CBO to score in such a way that it's not going to add to the deficit and I want you to find the money from within that broad sector. You've written a whole book which says we're wasting billions of dollars.

Find me a way now, not based on future behavior changes and incentives, but right now. If you can't -- if you don't want to do that deal, no deal.

MS. BAUM: So part of the problem is in the way they score things, so if I don't get to change the scoring system that's hard. Like in the student loan system, there are places where we could absolutely save money, but because of the way the student loans are scored, it looks like we wouldn't save money.

Because we're spending a lot of money now on student loans that don't get repaid or that go to people who are going to be doctors and lawyers and so on that we don't need to do.

I think, yeah, I don't want to -- I don't think that most research universities or most four-year colleges are overfunded, but there may be ways other sources of revenue are much more available to research universities and to selective four-year institutions than to community colleges that can't raise tuition, they're not going to be good at fundraising, they're graduates aren't rich, so we need to think about how to expand that base.

Well, we also need to think about how to use the money. There's a great new study from Dave Deming (ph) at Harvard who points out that -- who finds that if you have a thousand dollars, if you put it into the institution to improve student services, it will have a significant impact on completion rates. If you use it to reduce tuition, it won't.

So right now what are we doing, we're just trying to cut tuition, cut tuition, cut tuition. Maybe we shouldn't cut tuition for everyone.

MR. REEVES: I have some ideas where we could get the money, but I'm not the one that's -- maybe subsidies for endowments, tax subsidies for the huge endowments?

MS. BAUM: Let's have that conversation another day.

MR. REEVES: I'm going to ask Lashawn and David to come up and mike themselves up. Lashawn is going to speak first, but just while they're settling and very briefly, was there anything you disagreed about as you were writing the book? If so, what did you learn from the disagreement? Don't say you didn't disagree about anything.

MS. BAUM: We did.



MR. HOLZER: I think I'm on the workforce, I was more sympathetic to this notion of at least trying the financial aid in the noncredit space. I think Sandy always came to that with greater skepticism. I think I saw the upside more of that. I think that might be one area. I think I was always more positive on the accountability schemes.

MS. BAUM: On the performance-based funding you were more positive. I was more skeptical.

MR. HOLZER: Again, both of us recognized the downside as well as the upside. A lot of it simply depends on how you do it in avoiding the pitfalls.

MS. BAUM: So I would say we had differences of opinion, but it was more like -- it wasn't -- they weren't great. We learned a lot from each other, which was a great part of writing this book.

MR. REEVES: You can tell. Thank you.

I'm going to turn to our two panelists now who each have eight minutes to respond and then we'll open it up again for discussion.

Lashawn, I think you're first.

MS. RICHBURG-HAYES: Yep, great. So I thought this book did a really great job of meeting its goal of trying to mesh academics and policy making together, really written to translate what the research has found to policymakers who need to make decisions right away.

Oftentimes when you are in the position of needing to make policy, the evidence that you need to base that on is not readily available. So having something that tries to synthesize and move beyond sort of the we need more research is a great contribution to the field. So I have three comments on the book specifically.

One is about what works best for whom, the second is about details, so the devil is in the details in terms of refining solutions, and then my last comment is about equity of opportunity and outcomes.

So in terms of what works best for whom, I think the book does a really good job of laying out -- describing who the student body is. Because oftentimes folks who are not vested in postsecondary research tend to think about the traditional college student as being the average student, but really

independent students or nontraditional students are now surpassing our typical 18 year old going to college.

But yet most policy and most research is based on what's going to be a smaller demographic of students who are coming out of high school going directly to college.

This is really important, because many of the solutions in the book -- and it's not just the book, it's actually the research field. Many of the solutions are geared toward traditional students.

So if it's the case that older students, nontraditional students, students who have families themselves that they're supporting is growing in population, what works best for those students?

So we're talking about financial aid, student loans, et cetera, institutional support, think about the demographic for which you are working primarily and you're a student second, some of those solutions are not readily applicable.

I would also add that the book while it focuses on disadvantaged students and low income students, there's a lot of variation in that population.

So in addition to the independent students, there are different patterns of success for students of color. Within the minority population, there are different patterns of success among, say, African-American males, Native-American males, Latino males, and the book does not get into that level of specificity, but it's important to realize that because as both Sandy and -- made this point earlier, that there is not one silver bullet. There's not one solution.

So when you start to think about policy, it's important to think about the heterogeneity in the population, because low income students in general, there might be some solutions that may be more applicable if you're working with a population of disadvantaged males from low income areas versus not.

Finally I think about this issue of what works best for whom and a stock and flow type analysis. So by that what I mean is right now we are in a world for which there's this population proportion of (inaudible) students versus traditional students.

But as we start to look out 10, 15, 20 years from now, how do we think these changes are going to manifest? If I had to guess, I would say that given that folks are having fewer children, the average number of children per family is declining, a number of factors that increases the senses for folks

going back to school and earning certificates and teching up their skills, that we're going to have more of this situation of people going back to school trying to get incentives, trying to increase their salaries.

Given that that's the case, how do we think about the policies and recommendations we're making now and the research that needs to be conducted so that there are findings five, ten years from now that's going to be able to speak to these problems?

The book doesn't spend a lot of time on that. Obviously I think that those are really important, because as researchers it's important for us to think ahead about what needs to be available in order for policymakers to make decisions later.

In terms of the devil being in the details, the book does a wonderful job of summarizing the evidence base out in the world right now about what can work. There are a number of programs and solutions that have gotten a lot of publicity, such as CUNY's ASAP programs and the guided pathways idea is growing in popularity. It makes a lot of sense, the guided pathway procedures when you just think about it.

However, it's really important to think about the details for this, because these are not solutions for which a stroke of the pen is going to implement them with fidelity. ASAP, for example, most people will focus on the cost of it as being the barrier, but I would counter that the cost of ASAP is just one of two major barriers to getting it implemented and accomplished widespread in different institutions.

There's a student facing part of ASAP that's about fidelity and really close and tight integration. When you're at a public institution for which you need buy in of your faculty and you need engagement on multiple levels of departments, that becomes difficult.

Not only that, there's a part of ASAP that is about what I think about as the back office functions of having the administration being able to say you will do this, we will use those services this way, you will provide these wraparound services, it will happen like this. That's a fidelity of implementation problem that has a multi-faceted construction in order for it to occur. Thinking about how to make that happen on a broad scale is really difficult.

MR. REEVES: One minute.

MS. RICHBURG-HAYES: So moving on, given that I'm about to be cutoff, I think my last

point is this point that we've been grappling with, which is equity of opportunity and as well as outcomes.

So I really struggle with this idea of making it clear that you are less likely to be successful in an area, given your past performance. There's loads of history about tracking in this country. There's loads of research that suggests that there are inequitable treatment of students on the basis of color and income, and those things are happening at kindergarten. So if we're suspending students -- at the rate of suspension of students in kindergarten is correlated by race and income, what is the likelihood that you go through that system through high school and all of a sudden it disappears on the cusp of going to college, I find that incredibly unlikely.

So in our country, I think we struggle with this in different ways than Germany and Europe. I don't think there's a quick solution to overcoming it. I think our intentions can be pure, but as we all know, it's the execution and the implementation that matters.

MR. REEVES: Thank you, Lashawn. David.

MR. BAIME: Thank you for having me here and thank you, Harry and Sandy, for your book, which I do think is comprehensive and authoritative, as Richard said earlier.

I wanted to respond to a few things that have been said previously in this morning's panel, which of course has covered a lot of ground, and then talk a little bit about what my organization thinks, the federal and state governments might do as way of addressing some of the problems and challenges that we've talked about this morning.

First thing I would like to say is that, as we're all aware, I just want to reiterate the fact that it remains the case and unfortunately has become even more pronounced that it is the lower income students and individuals of this country are going to less well-resourced institutions, meaning for profit institutions and community colleges.

Richard asked a tough question a moment ago about subsidies, what we would do with a pie that wasn't expanding, and how we would move those around. I'm glad you asked that to the first presenters rather than myself, but I think --

MR. REEVES: I'm going to ask you too.

MR. BAIME: There's your answer. But I think it does need to be restated, even though it

doesn't change anything, that the community colleges have by far the fewest researchers stipulating the complexities of measurement to serve the students who have the most challenges in succeeding in postsecondary education.

Just to give that a little bit of grain for you all, the average community college faculty member and associate levels, so they're teaching five courses a semester for two semesters gets paid \$66,000 a year, the average associate faculty member.

Another thing that I think is important is that when community college budgets are cut, they lay off people. They may not be the most efficiently structured entities that's ever been created, but there is so little margin and so little reserves that funding is cut and heads roll essentially within the institution. So that's the reality that the colleges are facing.

We talked a little bit about accountability. I differ just a tiny bit with Harry there. To the extent I think our institutions are in fact under a large amount of accountability, they're publicly funded and they have boards of trustees at the state or local level, sometimes both. The oversight may not be what it might be, but when the piper is providing money for you, the institutions and the leaders are very much in the spotlight and called to question in terms of performance of the institutions.

I would contrast that with for profit institutions where although there is some state oversight, essentially the gate allowing the for profit institutions to receive Title 4 funding, which of course approaches 90 percent in many of those cases, is there accreditation which was created by the for profit sector to accredit institutions to participate in Title 4.

We pause at that as a fundamental difference between for profit institutions and public community colleges, all other differences notwithstanding.

Finally I just want to talk a little bit about some of the solutions and some of the things that we would like to see done. It's just a little bit more in the way of resources to help our institutions be more effective. I think the book does an excellent job of pointing out the many things that community colleges are presently doing to try to become more successful, guided pathways, overhaul developmental education, much more work with data, both inside the institution itself and in working with labor markets, early interventions working with high schools, as Harry pointed out. Lots of exciting things are being

done.

If there's one thing that drives me batty, it's the claim that community colleges and even higher education, I'll defend my colleagues there, are resting on their laws. I think it's absolutely untrue. They are innovators in all sorts of ways. We may be the leading sector in that regard, but colleges are changing very much. You see it across all sectors.

So moving on finally to what we think the government ought to be doing in terms of helping community colleges, both students and institutions as this book covers, the Pell Grant program.

About 38 percent of all community college students receive a Pell Grant. The grant is \$6,020, with a little bit of luck starting next July, \$5,920. Currently it needs to continue increasing.

We talked a moment ago about funding for short-term certificate programs, the Higher Education Act does not fund certificates shorter than 16 credit hours. So if you're 600 hours or 15 weeks or shorter equivalent, you're not funded, we believe that funding should be provided.

We also believe that Lifetime Learning Credit, which was created in 1997 and Tax Budget Balance Act should be restructured somewhat or at least examined by Congress to provide real funding for short-term training. The money is essentially directed primarily to graduate and professional students to the tune of \$2,000 a year and very much difficult to access for our short-term students and noncredit students.

We believe that the federal government needs to provide better data. We need a Unit Record Data System desperately. It's going to be a challenge for us to get Congress to do that, but we think it is irresponsible that we don't have one and it should be key to labor market earnings for reasons I think everybody here would understand. We need to know what happens to program graduates, whatever we might do with that information, and however it might be utilized by students and institutions.

Then at the state level, we think that articulation between two year and four-year colleges in some cases needs to be force fed to the institutions, so that there is more effective moving on, particularly in light of the information that's come out this morning about the A.A. programs and the lack of economic return for many of those, those students need to go on to four-year institutions.

Institutions themselves can cooperate more effectively. Community colleges are truly

local, but a lot of workforce policy needs to be done at a regional level. The TAC program that was created in 2010 forced colleges in some cases to work to get to the state level had many good results. We had some good data merging on that.

Finally, the state student financial aid programs have been historically created for students attending four-year colleges. They don't work real well for a lot of community college students, particularly students who simply apply late and -- for fixed pot of money and they apply in the summertime and the money's run out and they don't get the funds or short-term programs are also in some cases ineligible, so we would like to fix that. Thank you again for having me here.

MR. REEVES: Thank you, David and Lashawn. I just going to facilitate a quick exchange before we go out. Let's draw into a couple of those questions and ask Sandy and Harry to respond, but obviously there may be other things you want to respond to too.

Lashawn's point about drilling down by race and gender and some of the stuff, which you do (inaudible). Actually the completion rates for different races do jump out. So public two years, the percent is getting -- any credential people starting public two years for whites is 29 percent but for black and Hispanic Americans it's 20 and 21 percent, so there's a gap there and there's a smaller gender gap too.

If you think about the specific issues that are faced, say, by young men of color and particularly young black men and these institutions, can you say a little bit more about either your findings or your solutions particular -- would be differently framed for a racial lens as opposed to an income lens?

MR. HOLZER: First of all, I want to thank the discussants. Those are both great comments, so thank you.

On the racial lens, per se -- so it is true that if you control for achievement differences, those gaps narrow a lot, maybe not completely, but quite a bit. That's actually less true for the gap spaced by class as opposed to race.

But I think less -- lower income men in general, black or white, I think these workforce programs are very important to them. Again, we're generalizing hugely here, but I think here the liberal arts A.A.s are going to serve them less well.

We have evidence, for instance, that young men tend to do better in workforce programs that are things like apprenticeship, career academies, things of that nature, so I think strengthening those approaches, strengthening the work base learning options I think would be would be one useful thing for the racial lens.

The other thing, Lashawn mentioned earlier that she didn't think we paid quite enough attention to the nontraditional students, the older students in our --

MS. RICHBURG-HAYES: Solutions.

MR. HOLZER: In the solutions, that's probably true. They are different and they do have different needs. In the book we do talk about, for instance, trying to get people information before they decide which institution to go to.

That's even -- because the labor market information is even more important, since that group is almost always looking to enhance their earnings rather than just get a liberal arts A.A. or B.A., getting them more information in an earlier report that Sandy talked about in Pell Grants, we actually talked about possibly requiring every student in that population to enter a One Stop.

We have 3,000 One Stops across the country funded by the Labor Department. The vast majority of community colleges who (inaudible) knowledge never set foot in one. They exist for the purpose of trying to help people figure out what skill enhancement they need to get good paying jobs.

So that's one -- and I think the work base learning model also for that group are very important and also the services that help people with young children access, all those things are probably relatively more important for that population than for younger ones. They are in the book, but we probably should have highlighted them a little more.

MS. BAUM: I would just say that looking at the differences among subgroups, demographic subgroups, obviously in a book that is trying to cover this broad topic, we can't talk about the difference between -- I mean, you look at Hispanic students saying the difference between native born and immigrants and from Mexico and from -- these are really important questions that our book doesn't deal with.

Also the question of community colleges server very different demographic groups. I



mean, there are urban and rural and predominantly white, and some are more middle income.

So every institution in trying to implement solutions has to look at its population. I don't think we pretend that we could give that kind of advice to individual institutions or groups.

MR. REEVES: When you overlap gender and race, isn't it the case, and this is genuine question, but there is quite a big difference in the trajectories around college completion attainment between black women and black men that actually you're seeing an improving trend among black and whites and the whole panelists among black women, still a big race gap, but the trend for black men is much, much worse.

A, is that true and, B, does that alter your answer in any way or would you simply say, well, those low income black men will be helped by these general policies aimed at the low income anyway, or do you think they're more -- and, Harry, you've done a lot of work, for example, on the impact of prior incarceration and the distance in the labor market and what effect that might have. In fact, if you got some offenses, I don't think you're even eligible for financial aid. Is that playing in here for example around some of the race gaps?

MR. HOLZER: That might be, but in fact that gap is also growing wider and wider in all of the racial groups. So the numbers for lower income or working class white men, not just in community college but almost everywhere in society are looking really bad.

I think, yes, there are some issues like incarceration that's very unique, really overwhelmingly hurts black men more than anyone else. We should think about those students if they can meet the achievement hurdles, they need a lot more help and they certainly shouldn't be penalizing them for past.

So in terms of financial aid and other supports, those kinds of things we probably could target. There is this problem of men in general. Again I do think the workforce and the occupational associate programs are the ones that work best for them.

MR. REEVES: I'm going to pick up one of David's points and then come back to this issue I've just decided not to call tracking identification, selection, whatever. I think we do need to come back to that.

David offered a defense, tell me if I get this wrong, a kind of defense of a community college sector against the idea that title regulation race to the (inaudible) accountability mechanisms that you call for quite strongly and has argued they're (inaudible), accountability structures are already quite strong given they're public institutions anyway, and that actually isn't where the problem is around the country.

Is that a fair summary of your defense?

MR. BAIME: Yes, that's a fair summary of my defense and the way we conceive of the sector, but I just want to add that we do believe that better information, comprehensive systematic national information about the performance of institutions is badly needed and that a lot of the debates that we have about the effectiveness of the institutions would dissolve if that information were out on the table and we could make legitimate comparisons, because I think we get to the for profit issue, despite all of the criticisms they've had, we saw some data this morning, is that we still don't know a lot of the educational outcomes of the institutions, particularly in terms of the workforce.

MR. REEVES: You think more information might do some of that work anyway to incentivize improvements, my guess is the evidence from college score -- from various attempts in this direction is that it's been mixed in terms of its impact and incentives, what's your response to the defense?

MS. BAUM: I think we are setting an impossible task for community colleges, right. We are asking community colleges to take every person who has -- who comes there with any background for any reason and offer many, many different types of programs. Many of the programs in community colleges you really couldn't call college. I mean, it's English as a second language college. What is college and we're asking them to be successful on a large scale in all of these ways.

I think they can be very innovative and resourceful and talented and everything else and still not succeed in meeting all of those goals, but the problem -- when you're in a situation where you have to say, well, okay, only 20 percent of the students who walk through our door ever emerge with a credential or 30 percent, or we don't know exactly what the percentage is, but given our circumstances that's great. It's not great. Obviously for 70 percent of the students, it's a bad outcome, that means we

need other solutions. I don't think community colleges internally can find those solutions on their own. It's a big social problem, but I'm not willing to say they're doing their best, so let's not worry about those 70 percent of the students.

MR. REEVES: We're about to come out to the audience, so please be ready with your questions, be ready to raise your hand, and a microphone will come to you.

Back again, I think Lashawn started with this, the issue of the fear that an approach, which identifies an appropriate pathway earlier for certain people, given the history of tracking in the U.S., understandably causes concern.

I come to this as a new American and I've learned that this is much hotter button issue than is elsewhere. In Germany they track at 12 and they have fantastic vocational and there's lot of people there arguing that that's a problem, that you're identifying too early.

Certainly in most countries the idea that you wouldn't start thinking at 18, you're going to start finding more appropriate pathways is completely uncontroversial. It remains controversial here, partly because of this kind of historical issue.

So I think if I framed your (inaudible) correctly, it's in practice what happens on the ground is that you look at certain people and go well, you base it on certain presumptions about their background, what school they went to, their race, maybe their gender, and you say, yeah, I think shop for you. Vocational education is almost always for other people's children.

That's one thing that always strikes me about this debate is that when we're talking about the value of these things, we are very rarely thinking about our own children. We're putting our own children through four-year colleges.

So that sense that it's always for other people's children and that those other children may be disproportionately of color creates this strong reaction (inaudible), which is in practice it will replicate racial inequality and income inequality and maybe gender inequality, even if you set out in theory.

On the other hand, the idea that we're just never going to say to people maybe four-year college isn't for you, given where you're from, is maybe hurting the very people who most need the help. I

got one more round on this.

MS. BAUM: I agree with you and that's not what we mean to be suggesting. Because if you say to somebody you have to do this and you can't do that, that's tracking them into one path. I don't think we're suggesting that at all.

What we're saying is we need to expose students to more different kinds of pathways and opportunities and we need to create those pathways and make them productive pathways, not we need to say to people, your third grade test score wasn't high enough you have to go this way.

Let me just say we track people dramatically when they're 18 years old. We say you get into a selective college and you don't -- and you're only option is a community college and we do that.

Look, at some point -- some people transfer from a community college to a highly selective four-year institution, so we don't close the door totally, but we do make it very challenging.

So obviously we acknowledge that at some point that system could be modified, but we are saying you have to pursue this pathway. I didn't study premed. If I wanted to go to medical school, I was going to have to go back and do some really big things in order to open that pathway to myself. Nobody told me I can't, but I'm looking at it and I realize it would be really hard for me to do that now.

So I think we have to help people understand better what their options are. We have to create better options. We don't have good options now for people who are not doing well academically, and we need to create those options and we need to encourage multiple options. You know what, we close the door to upper and middle class students on vocational education, because we say that's not good enough.

If we had a society or we had more respect for different kinds of occupations and different pathways, we would open doors for people who now have to go this way because their parents --

MR. HOLZER: The best models of high quality career tech and high school, get away from that old-fashioned that it's either/or. If you're in CTE, it's only those. The best career academies, lots of kids in college prep backgrounds are in the career academies doing some studies in health care while they're taking AP classes in English Lit. There's no reason why it has to have such a rigid -- that's the model to try to reduce the segregation.

You try to -- the notion is that in some places that everybody would take at least some career enhancing classes, so you reduce the stigma associated with that and you try to offer more blended models. You don't have to make this choice one or the other.

The other thing I would say in our recommendations, we did talk about this idea that if people -- if people have low achievement and they're going to be assigned to developmental ed, let's identify that earlier.

There's no reason why in the ninth grade we can't tell people, you want to go to college, these scores that you have in math and science, they have to be -- instead of saying, you can't go, you better think of shop class, you try to target resources for them to actually try to improve their outcome.

So that would be a way of trying to counteract the disadvantages that Lashawn correctly pointed out, rather than just slamming doors in people's faces who are in that situation.

MR. REEVES: Let's ask about this question respect. I think one of you just used that. You use that word in here actually about CTE and high school. I want to invite all the panelists to respond to this and talk about -- you use the word stigma as well.

Let's just say reputation. There are certain tracks, certain pathways, I should say, certain institutions, certain subject matter which have a particular stigma or something associated with it, right.

So when I said voc ed is for other people's kids, that is because those who are in a position (inaudible) think that it's lower quality, lower admissions standards, and lower value in the labor market. So we are not seriously thinking about those options for our own kids, particularly when we see all the charts that you put up.

It's partly because I have a high school senior. One of his options is our local community college, which is fantastic. It's Montgomery College, so we're in a good position. It's quite clear that when you think about -- it's a good track, it's a good way to go, lots of options.

In the kind of -- among the classmates and so on, there's no question even at that age it's attached to a certain -- it's attached to a sense of, oh, dear, I'm going to community college. Oh, what happened.

It's almost like you're telling somebody you've had some sort of accident, you're going to

the hospital or something like that. Within certain class circles, it does have that stigma.

You say, we need to increase the respect of CTE, of community college, see it as an option for more people, not just for those who have, quote, failed but for others. How do we do that?

I'm asking David, Lashawn, I'm asking all of you. It seems all the policy ideas in the world aren't going to make much traction if we continue to have this mental geography of this system, which employers have, which parents have, and which students themselves have about what constitutes good in the system. How do we address that? Another example of community colleges (inaudible) that have successfully done that and drawn in (inaudible). Let's start with you, David.

MR. BAIME: I do think it starts before the collegiate level for sure in most cases. There are many high school programs, particularly I know in the south, that have been provided technical education programs that feed directly in the community colleges.

Salt Lake has one in aeronautics, so it gives people a sense that they can get a good job if they study in a specific field starting at the high school level.

I think this is obviously a tremendously complicated issue in terms of people's aspirations, their level of educational preparation, their family, cultural factors as well. There really isn't a simple answer to it, but one thing that I do know is that for many students who do go to community college, who succeed, they find themselves much better off than they were when they started. Certainly they're better off financially than their parents were.

So you might say that it's from the perspective of maybe most of the people sitting in this room, you don't want your child to go to the local community college, because in some people's minds that has a stigma associated with it.

But if you're a first generation student or you're an immigrant and you go to NOVA and you get in the nursing program, that's damn good for you and that's real success, that's a real step forward for you and probably your children as well if you have them.

So I think that if we put the lens of people have bachelorette degrees look at community colleges, it might not be satisfactory to have your child have what as it's been defined and Brookings Institution has done work on this too, you're a middle skills job.

A middle skills job is by definition a job -- it's a subbachelorette credential that in general does not garner the same earnings as bachelorette holders receive, and yet it's much better than high school and it's a lot better than nothing.

So how you thread that needle, how you make it attractive to somebody who maybe isn't going to get into Harvard College but has the wherewithal to succeed at a community college program, it's really difficult. As I said at the start, it needs to begin early in the educational spectrum.

MR. REEVES: Lashawn, do you agree that stigma or reputation is an issue for some of these?

MS. RICHBURG-HAYES: I completely agree. So I agree with David that it needs to start early and I agree with Harry and Sandy that it needs to be available. I think one model that I'm really intrigued with is in New Jersey. New Jersey high schools have what's called academies. They're actually selective high schools.

But with the selection -- so this is clearly a college prep program, there is targeting of students who are eligible. You need to test in. But the one thing that they do is they all require some career focus, so it could be culinary, it could be mechanics, it could be auto mechanics, there's something that everyone is doing.

In that way you start to change the parental focus of what it means to have CTE. It's now different. It's not voc ed. It's career enhancement, my kid is definitely going to college. That perspective can trickle down.

What really concerns me and all of the solutions is really about the execution. It's not so much the idea. I think the ideas are good, but once you send an idea out into the field, what you get often is poor fidelity to design. How do you counter the implicit bias of administrators and teachers in executing that program, and then the manifestation is something that was not intended. That's really what I'm focused on.

MR. REEVES: I'd love to invite you to reply and then we'll go out.

MR. HOLZER: I'll just say one thing. I have three daughters, two of them are still in high school. I would not mind if they were required to take some career enhancing courses, certainly at a

minimum career information, career learning labor market information, but also -- I mean, Lashawn is right, these academies, career academies, you can have topnotch students learning something about health care and getting some work experience in health care. I don't think that's a bad -- there's always an opportunity cost and what do you have to cut, but from that point of view that it's always for someone else's kids, if we have a system where even our kids are getting some of this, then the stigma would fall.

MS. BAUM: I totally agree with that, but I think David's point is really important about the difference in your expectations and where you're coming from. Given the inequality in our society now, we can't -- if you think of an outcome like the outcome you just described, get a nursing degree at a community college, that is significant upward mobility for many people. It is downward mobility for other people. We have to acknowledge that that's the case.

We're not going to get parents to encourage their kids to go -- follow paths that represent to them downward mobility, so the solution is going to have to be much bigger than within the community colleges.

MR. REEVES: I think nursing is the most upwardly mobile profession isn't it in terms of -- yeah, in terms of bringing people from poor backgrounds, income distribution.

MS. BAUM: But you would say to your kids why don't you want to be a doctor, so how do we solve that problem?

MR. REEVES: I'm going to open it up now, (inaudible) I can tell. Let's start with this group here, the gentleman right in the back with the glasses there. Let's start with you.

If you wouldn't mind identifying yourself, that would be great. When you come to the panel, I'm not going to ask all of you to answer all of the questions, because they're -- otherwise they're 48 questions very quickly. Let's start with you, sir.

MR. HARDY: My name is David Hardy (ph). I'm from Philadelphia. Just last week the Peer Research Institute put out a study that showed that in Philadelphia race is the most significant factor in people getting college preparatory educations in public high schools.

We've talked about this topic and it's certainly geared toward minority students and it seems to me that we haven't talked about the schools a lot of these children have to come from that don't



prepare them for college. It isn't about they didn't do the work. We have people who are valedictorians who went to school all the time, they did all the work presented to them, but it wasn't enough for them to be successful in college.

Unless we start talking about that, all this other stuff really means nothing. You're acting like the colleges get people all at the same level and you're messing it up. That's not what's wrong. They get messed up long before they get to you and nobody is saying something about it. So I hope we can talk about --

MR. REEVES: We'll take a couple more and I know that Sandy and Harry can talk about it, because they do talk about it, but the lady in front of you.

MS. MACK: My name is Lori Mack (ph). I'm from International Bachelorette. I'm wearing my IB blue today by accident. The IB's newest program that we just finished some research on this year is called the career related program, and I was about to jump out of my seat the last ten minutes or so, because this sounds like it addresses a lot of what you all are talking about.

It's built on the triad of employability, academic, and technical skills has three components, two or more IB courses, a CTE component, and then personal professional skills and a whole suite of other employability kinds of seminar courses, things like that. We found that about four to five of those kids went to college of the sort of early adopters --

MR. REEVES: Say that again.

MS. MACK: 81 percent, that was the entire population 2013 to 2015. Three quarters of them went to four-year colleges, pretty traditional looking college students in every way in that group, and about a quarter went to two-year colleges for their initial enrollment.

I was pretty excited to see that the most common major of those who had declared majors at two-year colleges was liberal studies, general education, bachelor prep, that kind of stuff.

I was like it looks like they're planning to transfer to four-year colleges afterwards. Now my eyes have been opened a little bit.

MR. REEVES: Do you know if they did?

MS. MACK: No. It's just really, really early outcomes, because it hasn't been around

long enough basically.

MR. REEVES: It would be good to know, because that's --

MS. MACK: Ask me again in a couple years. I'll be happy to find out. Yeah, that program hasn't been around long enough for us to see it.

Basically my question is: With these students -- they took IB courses in high school. They did college and career readiness kinds of coursework and we saw that their one-year retention rates in two-year colleges were higher than national average for one-year retention rates for four-year colleges. The (inaudible) whole group is 89 percent. It's a really, really high persistence which makes me think maybe these kids are the ones who will be served well by these liberal studies kind of majors, but I don't know. I'm speculating and I'm biased.

So my question is basically: Are there ways for these liberal studies programs to serve students better or maybe are there good examples of community colleges that are doing this really well?

Because a study from National Student Clearinghouse that was recent that I remember showed that if a student finishes an associate's degree, transfers to a four-year program, once they do that, they're just as likely to finish their bachelor degree on time as somebody who's been in it the whole time, so I'm wondering who are those liberal studies programs for and are there examples of them working really well?

MR. REEVES: Thank you. I think the gentleman right in front of you and then we'll come to the panel.

MR. BAULMAN: I'm Frank Baulman (ph) with the National Association of State Student Grant Aid Program. So a lot of states have data, say average starting salaries by school and by major, but we find not a lot of students are looking at when making a decision. On the flip side say Purdue has an income (inaudible) program that sends pretty clear market signals by saying less percentage for your income and shorter number of years in terms of what you should be majoring in maybe, what would your thoughts be on linking need base aid to that sort of thing?

As an example if I was going to attend a school with a 10 percent graduation rate (inaudible) four-year schools. David's schools have different metrics that are relevant but -- and then

80 percent graduation rate, maybe \$8,000 Pell Grant is more appropriate, because from the federal investment viewpoint I'm getting the same rate of return on both of those and ultimately as the federal investor, my goal should be I'm getting 25, 28, 31 percent of that student's earnings for the rest of their life, that's a great investment.

MR. REEVES: We'll come back to the panel now. Three questions from David is happening at high school. I will say one of the virtues of this book is that you simultaneously recognize the existing in equalities but don't let colleges off the hook.

There's a tendency in this field for colleges to blame high schools, high schools to blame middle schools, middle schools to blame elementary schools, and elementary schools to blame kindergarten, and kindergartens to blame parents, and everyone gets off Scott free, which, of course, is a bit of all of those. I do think (inaudible).

That's why you can't do any of this stuff. So high school the second is you're very down on liberal arts and humanities associate degrees very, are there circumstances in which that's good other than just transfer can be (inaudible). Then this question about I guess it's skin in the game, but it's also a bit more accountability. If we're going to spend this money on needs based (inaudible), let's spend more of it at the institutions that are doing better and use it to incentivize (inaudible).

So let's come to our (inaudible) first and perhaps we'll start with you Harry.

MR. HOLZER: So the first gentleman who talked a lot about high school, you're obviously right. We do talk about reaching back into the high school during high school, whether it's dual enrollment programs or these programs that identify the gaps and try to -- so it's not like we're saying that's fine, that's a given.

However, at the end of the day, you still have this large chunk of people going off to college, community college especially, not prepared. We have to take as given that that's going to the reality. Given that reality, what are the best ways to address it. It's not either/or. We certainly endorse doing more of that thing, but we do have to deal with the reality what happens when people do get to postsecondary.

So the question of are there times when liberal arts -- I think liberal arts within a

framework, a guided pathways' framework, where people start -- everybody starts broad and then the structure kind of forces them gradually to narrow.

They have much more information when they make those choices and so the choices are better that that's a sense -- within that framework, liberal arts is not as bad. We're not saying nobody should take liberal arts if they're never going to transfer, just recognizing that the pendulum has swung too far in that direction and people need -- what's interesting when I thought about this, of the things I've written recently on the automation problem and the fear of robots replacing everybody, it's clear that what everybody agrees on is that one of the solutions to that is to give people a broad skill set, a broad cognitive skill set.

So if they face these -- liberal arts does that too. It's just trying to find that right balance and have people -- again they start with that, but to have a structure where gradually they have to make tougher and tougher decisions and they have the information to do that, so I think within that framework it would be better.

MR. REEVES: Maybe, Sandy, you can take all of them if you like, but especially the third about income share agreements, get in the game using financial incentives.

MS. BAUM: That's my plan was to take -- because I am not (inaudible) this idea.

This is for when President Obama proposed a rating scheme for colleges and universities. He wanted eventually to link it to the financial aid system, with the idea if you gave students the incentive of you'll get a larger Pell Grant if you go to an institution with better outcomes that then students would vote with their feet.

I think this is a terrible idea. It's a terrible idea because it means that you're going to end up giving less financial aid to the students who need it most, because students don't and can't make decisions in that way.

If you're going to your local community college, it's not like if you hear that there's a community college across the state that has a better graduation rate or better employment outcome, so you could go there, you can't.

So it just is -- this is not the way students make decisions. This is not the appropriate

incentive system. I think the income share agreements carry a lot of risk in this way also.

The idea that if you have a higher interest rate on your loan if you major in art than if you major in engineering, so maybe I better major in engineering. First no one knows the interest rate on their loans and second we don't want people to choose engineering instead of art for this reason.

Our point is you need to have adequate outcomes. You need to have a living wage, not you need to maximize your earnings.

So I think structuring the system to get students to do that is bad and student aid is meant to provide opportunities for students who need them most, not for those who are going to have the best outcome.

MR. REEVES: David and Lashawn, did you want to pick any of those to respond to, the problems with the high school, defending associate degrees, or skin in the game?

MR. BAIME: Real quickly I'll just run them down, preparation issue obviously is critical that it makes the community college have a huge responsibility that perhaps in some cases it's not fully equipped to meet at least all the demands of the students.

One of thing I do want to comment upon that's come up a number of times this morning is that a lot of what is described as being failure, non-completers in the context of this book, apply to students who in some other ways could be said to have been served well.

It's absolutely antithetical to the discussion about success and completion of graduation we're having right now and for all the right reasons. But for some students who are very, very poorly prepared, I would pause it that that student is better off for having taken a couple courses at a community college than if they had not attended at all.

In the absence of having other alternatives for that student, this is the best thing that we can offer those students at this point in time. I think a lot of policymakers fail to realize that, and there's an aggregation of our almost 8 million students every fall into one data clump and it distorts the benefits of some students or the disaggregated students.

On the issue about the transfer, it's only -- and the associate degree is that students have to be able to transfer easily as I mentioned when I commented. They need to have that information up

front. On (inaudible) A.A. degree as it's been pointed out just doesn't buy students a lot in the marketplace. I'll stop there.

(Indistinct chatter)

MS. RICHBURG-HAYES: So I completely agree about the high schools failing and I don't think it was the intention of this book to focus on solutions and interventions in high school that cover that transition period, but there is a lot of work out there and a lot of innovation to try to bridge that gap, so I think that is something we can continue to focus on.

In terms of the liberal arts study, the question with the International Bachelorette made me really think about selectivity. Those programs are very rigorous. There are certain types of students who enter into those programs. There are certain types of high schools that offer those programs. Those students being prepared in such a way makes me wonder whether they are already equipped to do better in a liberal arts program in a community college with the intention to transfer versus a student not so prepared. So I'm not sure where the causality is there.

MR. REEVES: We got time for a couple more as long as they're short and sharp. Just come to the front. Here first and then we'll go to the gentleman two rows in the back and the gentleman right of the back.

MADISON: My name is Madison. I'm from MIT. So we've had a couple of references to challenges that associate graduates get by transferring to four-year bachelor programs.

Would anybody on the panel like to kind of expand on what those challenges are and how we can strengthen those gaps between the community colleges and four-year institutions?

MR. REEVES: Great. Thank you for that and thank you for being so succinct as a model for the others.

The gentleman two rows in the back there, yep.

MR. MELTON: My name is Michael Melton (ph) and I heard about your book and someone invited me here. I kind of feel like I'm a test study for what is taking place.

Growing up in a single family, poor in the projects, very poorly educated, but then you get an opportunity to go to college or junior college, you pick college, you pick a degree, you're totally

unqualified for, then the choices you have to make to get the degree, and then to wind up where I am right now, I'd like to talk to someone or any of you in more detail about my life experiences. I don't think if anything is like that in the book, but I'd like to offer myself up to some of my thoughts on this.

MR. REEVES: Where did you graduate from?

MR. MELTON: University of Missouri, Columbia.

MR. REEVES: Thank you. I think there's -- yeah, the gentleman right of the back. He's waving, waving pretty -- yeah, better be good.

BLAKE: Thank you everyone by the way.

MR. REEVES: Name.

BLAKE: My name is Blake. I'm from Chicago. I go to GW. I'm a grad student, International Development.

My question was -- I mean, kind of tied to the gentleman from Philadelphia and the gentleman here. There's a common rhetoric in Chicago obviously around schools and young students in high school kind of diverging off of that path. So there's definitely a problem beforehand, but a semi-solution to that has been mentorship programs.

I was curious, I didn't read the book, but if there is any emphasis on the effectiveness of mentorship programs throughout high school and throughout community colleges?

MR. REEVES: Thank you. So we have a data point offer from Michael. Thank you for your brief story and the questions from Madison are the importance of transfers and how can we improve them.

I think there are huge variances in (inaudible) transfer rates by state and institution, so we must know something about that. Then it's back to this kind of point about helping out in high school, a mentorship. I think ASAP contains them, strong mentorship elements, there is the reputability program that Lashawn has identified.

Perhaps take one each or divide --

MS. RICHBURG-HAYES: On the transfer question, I mean, it's very clear that there are lots of barriers who transfer, which include -- some of the barriers are harder to deal with like here I

am, I'm going to a community college because I am place bound and I would have to go to a different place and a more expensive place in order to go to a four year. But many of the credits don't transfer, so you lose a lot of the time.

There was one study that just came out that just said actually you think you're going to a community college to save money, but because of credits not transferring it ends up being frequently much more expensive.

So state systems obviously should be able to do better, but they've known this for a long time and it still doesn't seem perfect in making a smooth transition and a smooth transfer. So we need to make all those possibilities easier.

There will still be many students who think they're going to transfer and they don't. So if you complete an associate degree and you transfer, you have a good chance of getting a bachelor degree, but most people don't have that happen.

So we still, as good as the transfer system might be, need to make sure the people who don't transfer end up with a marketable credential.

MR. REEVES: Mentorship and/or transfers.

MR. HOLZER: Well, actually I was going to pick up on Michael's point. What I would like to know, I think our whole (inaudible) is for folks like you, what was the key to success, what enabled you to overcome those barriers. You don't have to answer right now, but if you want to (inaudible).

MR. REEVES: (Inaudible).

MR. HOLZER: But if we can identify those and provide more of that, number one, in the K through 12 years so people can try to get back on path before and number two what was it during the college years that enabled you.

Then if we can identify those, then we have more information on what it takes. With that information, you wouldn't have to discourage people necessarily quite as much if you could provide more of those supports.

MR. REEVES: Have a go, just in a couple of sentences.

SPEAKER: Well, part of it is that my mother told me that a friend of hers had a son who



got an engineering degree and he was able to get a job. She said -- when I was graduating, she said, well, don't go into the military, why don't you try to go to college and try to become an engineer, not realizing what it took to be prepared to study engineering at a A.A.U university.

But then the university itself never told me, well, you can't try. They didn't give me money, they didn't give me scholarships, but they admitted me. Then once you're there, you have to realize if I'm going to do this, I'm not going to have a traditional college experience, this is going to be work, it's going to be catching up on something where all of the merit students from the state go to that degree and here you are, you don't even know what data is, you've never seen algebra, and now you want to be an engineer.

What made the difference was I'm going to do it and I'm going to sacrifice everything else that it takes to do it, and that was the difference. Then you don't want to let your family down, your friends down, you're going to do this, but it's really self-sacrifice once you decide you're going to make that decision.

MR. HOLZER: But it would have been much better if you would have found out that information in the high school years and then start --

MR. REEVES: He might not have gone there. He might not have gone.

SPEAKER: That's true. That's true also. If I had known how hard this was going to be, I might not have done it, but I also think that I should have been at least exposed to some mathematics while I was in high school, some mathematics.

MR. REEVES: You may be a perfect story. You may also be a researcher's nightmare in a sense that you're the exception that proves the rule that they've just written a whole book about. There's a huge variation. There's always going to be variance within these averages. I think that's the point that's really trying to come out.

SPEAKER: That's what the --

MR. REEVES: You're going to be faithful to the individual stories but also faithful to the data, right, you're an N of 1, that's a great thing. But if you go an N of 4,000, if you're spending public money, you got to think not just about the exceptions but also about just as a rule with someone like you

who succeeded.

SPEAKER: (Inaudible) I saw was how to measure aptitude as not being what you already know and how you used it versus your ability to figure things out and get it done.

MR. REEVES: I'm going to cut you off, because you're the best speaker here. So if you could start, that would be great, because you're making it hard for us.

Does anybody else want to pick up on the mentorship part or the high school? We are very short of time.

SPEAKER: So I just wanted to pick up on the articulation point which -- well, the transfer point which I equate with articulation agreements, which are notoriously difficult to do.

There's been a recent book by Lexa Lo (ph) at CUNY describing the difficulty of just getting articulation agreements within a system. So this IS a system that has both community colleges and four-year universities and yet they struggled to do the transfer seamlessly.

I think it's an illustration of all of the factors that go into moving from one segment to the next. It's difficult to do in a system then think about what happens when you have this arbitrariness between noncredit and credit and doing that across state lines, et cetera. It's almost a mind field and we yet set it up as if you can start at junior college and you can go on.

MR. REEVES: Thank you very much. We're out of time unfortunately, so I'm going invite Ron back up to the podium to close.

MR. HASKINS: I said in the introduction that these kind of events are the bread and butter of the center that Richard and I run. I didn't realize how great a prediction that was.

You start with a strikingly original book by great authors that have a tremendous background in the topic, you have great reactance to bring all sorts of issues, and have you a fabulous moderator and everybody learns something.

One of the most important things we learned here wasn't as explicit as it might have been is if we don't solve this problem, this middle group, kids that could do well at a community college or could get some kind of certification, we are not going to have a big impact on equality of opportunity in America. We have to solve this problem.

Thank you for coming.

(Applause)

\* \* \* \* \*

CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Carleton J. Anderson, III

(Signature and Seal on File)

Notary Public in and for the Commonwealth of Virginia

Commission No. 351998

Expires: November 30, 2020

ANDERSON COURT REPORTING  
706 Duke Street, Suite 100  
Alexandria, VA 22314  
Phone (703) 519-7180 Fax (703) 519-7190