

State Merit Based Scholarships for Minnesota

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Introduction

Minnesota has an excellent system of colleges and universities, but this system currently faces a few difficult problems. First, enrollment in colleges and universities have declined by almost 20% from its peak in 2010 to 2016, in part due an improving economy and in part due to slower demographic growth in the college age population.(1) Second, Minnesota has enormous racial gaps in its own education system (it has the 3rd highest gap in state high school graduation rates by race) that has gotten an increasing amount of attention recently.(2) Third, many students in Minnesota have trouble paying for college, where the average tuition at public four year colleges here has risen by 24% from 2008 to 2018, while state spending per student has declined by about 6% over the same time period.(3)

Minnesota could try and address all three problems by creating a new merit based college aid program modeled after the successful system adopted by Kentucky about 20 years ago. Kentucky provides a yearly scholarship to college students that ramps up based on their high school GPA. The aid starts to phase in once a student achieves a high school GPA of 2.5, and the portion based on grades maxes out with a \$2,000 yearly benefit for those with a 4.0 GPA. Students can earn an additional \$500 a year based on how well they do on the ACT or SAT, and can earn up to \$300 per year for each AP class that they complete as long as they qualified for a free or subsidized school lunch at some point in high school. The scholarship can be used at any in state college for a total of 4 to 5 years, public or private, and each student will continue to receive the full scholarship as long as they maintain a certain college GPA while in college.(4)

Six Advantages to Adopting a Kentucky Type System of Merit Based Scholarships

This new system of college scholarships has been remarkably successful in Kentucky, and having Minnesota adopt a similar program would accomplish six particular goals. First, it would create a new system of higher education subsidies that are extremely transparent, while also making it easier for students to pay for college by rewarding those who do well in school. Since this would be a new program, that means new resources would be devoted to it, and these scholarships would reduce the amount that students have to pay for their own education. The scholarship is broad based, so nearly everyone knows about it, and each year high school students get a letter sent from the state keeping them up to date on the amount of aid they have qualified for so far. There are no forms or bureaucratic barriers that need to be overcome, since the schools automatically send the grades, ACT scores, and AP credits to the state, and the state then calculates the award and distributes it to the school without any action needed from the students themselves. The amount of aid is modest, averaging just over \$1,200 per student per year, but these scholarships are not reduced due to other forms of financial aid in order

to lower the overall cost, so the student does pay somewhat less for college as a result. In addition, it provides the aid in a way that encourages students to do well in school, rather than rewarding them based on parental income, or just providing equal aid to everyone who goes to a public college or university, so philosophically this approach should appeal to conservatives as well.(5)

Second, adopting a Kentucky style approach will likely improve high school graduation rates in Minnesota, especially for Black students. Once Kentucky started their merit based scholarship program in 1999, high school graduation rates (as measured by the Average Freshman Graduation Rate) rose by 8.0 percentage points from the 1999-2000 school year to the 2008-2009 school year. The high school graduation rate only rose by 3.8 percentage points over the same time period nationally, and this bump in their high school graduation rate put them in the top 10 for most improved states in the years following its adoption. In the 2017-2018 school year, Kentucky had higher graduation rates overall compared to Minnesota (as measured by the Adjusted Cohort Graduation Rate), but this difference was especially stark when divided by race. Kentucky had a graduation rate of 92% for White students compared to 88% for Minnesota, but had a much higher graduation for Black students of 82% compared to 67% in Minnesota. The Adjusted Cohort Graduation Rate is considered to be more accurate (since it adjusts for migration in and out of the state) but only goes back to the 2010-2011 school year, while the Average Freshman Graduation Rate is simpler to calculate and goes back for many decades. When looking at the most recent year for the Average Freshman Graduation Rate, Minnesota has higher graduation rates for White students, but Kentucky still does better for Black students. Overall however, the data does make it clear that Kentucky's high school graduation rates went up substantially after it adopted its merit based scholarship program, and currently has much better high school graduation rates for Black students, and perhaps better graduation rates for White students as well depending on how you do the calculation.(6)

Third, enacting a Kentucky style system of merit scholarships would likely increase initial college enrollment as well. After Kentucky adopted their scholarship program in 1999, freshman enrollment went up 8 percentage points faster than the national average in the following 6 years, despite spending a relatively modest amount of money on the program. This compares favorably to other broad based state merit aid programs, which do usually see a short term increase in freshman enrollment relative to the national average. If Minnesota were to adopt a similar program, then freshman enrollment would likely increase as well, which could offset some of the recent declines in college attendance and ease some of the financial pressure that certain college and universities are currently experiencing.(7)

Fourth, a Kentucky style program could see dramatic increases in the number of Associate's degrees awarded. After their scholarship system was adopted, the percent of 20 year olds getting an Associate's degree rose from 12% to 19% between 1998-1999 and 2008-2009 in Kentucky, an increase of 7.0 percentage points over that time. For comparison, the same statistic at the national level rose by only about 4.4 percentage points. Going to a 2 year college might look particularly attractive in Kentucky since the scholarships are modest and might only cover a small portion of tuition at a 4 year school, but might cover a substantial portion of tuition at a community college. Plus, the scholarships can be used for up to four years even if you attend a two year college, giving you some extra flexibility to earn your degree at a 2 year school.(8)

Fifth, a Kentucky system of merit based scholarships could increase the number of Bachelor's degrees awarded, but some modifications probably need to be made in order to see that number go up considerably. From the 1998-1999 school year to the 2008-2009 school year, Kentucky did see the percent of 22 year olds earning Bachelor's degree rise by about 5 percentage points, but the national average rose by the same amount over that time period as well.(9) In order to encourage more people to graduate with a Bachelor's degree, a merit aid system in Minnesota might want to lower the college GPA cutoff that students need to maintain in order to keep their scholarship. Some broad based merit aid programs make the cutoff at a GPA of 3.0, and this means only about 50% to 60% of all college students keep their scholarships in their later years when set at this level.(10) One alternative would have a state phase in the aid for college grades as well as high school grades. After making this change, college students earning a GPA of 3.0 or above would keep their full scholarship, and those with a GPA below 2.0 would lose their entire scholarship, but then a 2.1 GPA would be able to keep 10% of their scholarship, a 2.5 GPA would keep 50% of their scholarship and a 2.9 GPA would keep 90% of their scholarship. This would increase the percent of scholarship recipients who keep some or all of their award up to around 90%, while about 30% to 40% would only get a portion of their original scholarship, which means the total cost of the program compared to Kentucky would increase by about 17% overall.(11) Kentucky already does some form of this themselves by offering students to keep their full scholarship if their first year GPAs are above only 2.5, while also allowing some students with a GPA between 2.5 and 3.0 to keep about half their scholarship in their later years.(12) Minnesota could go even further by extending this down to a GPA of 2.0 and phasing it in even more gradually. The other option to increase graduation rates would offer a higher scholarship for those going to 4 year colleges, since 4 year colleges have much higher graduation rates than 2 year colleges. Perhaps increasing the award by 50% for all students who decide to go to a 4 year college, which would increase the average scholarship from \$1,200 to \$1,800 for those students who do, could be an appropriate way to do this without getting too expensive.

The sixth advantage to providing a Kentucky style merit aid program would be that it would likely decrease the gap in college attendance between White and Black students. One study showed that even though Georgia's merit aid program increased the gap in initial rates of college attendance, three other states providing merit aid states scholarships actually reduced that particular gap.(13) Given how well Kentucky has done in raising high school graduation rates for Black students, this would suggest that Kentucky's program likely reduced the gap in initial college attendance as well, even if we do not have any specific data for this program.

Designing a Policy for Minnesota

Since Kentucky's merit based scholarship program has been so successful, Minnesota should try and follow its model quite closely. The key feature is ramping up the size of the scholarship based on high school grades, where a strict cutoff provides large benefits to those already doing well, while also leaving a lot of lower performing students unmotivated since they are far from the cutoff. By phasing it in gradually, this type of scholarship encourages both lower performing students and higher performing students to do better in school, while also providing some benefit to students with lower GPAs which likely expands the pool of those who would consider going to college after high school. Adopting a

similar phased in approach for the college grade cutoff would likely improve this policy for college students as well, where allowing people with college GPAs above 3.0 keep their full scholarship, while ramping up the benefit for people with GPAs between 2.0 and 3.0 would provide a stronger incentive to do better in school, while also encouraging some students with lower GPAs to stay in college since they still get to keep some of their scholarship.

Another key feature that Minnesota wants to replicate is the incredible transparency of the Kentucky scholarships. Kentucky's program makes this easier by protecting it from interactions with the financial aid system. Some states offer merit scholarships for students who do well in high school, but require them to fill out financial aid forms in order to qualify. This means a student still has to go through the complex and difficult financial aid process in order to go to college while also likely reducing the amount paid out by the state. Kentucky has what they call a first dollar coverage, where the scholarship is determined by grades, ACT scores, and AP classes, and once set, the financial aid system has no impact on it and the student gets to keep the full amount, whether or not they apply for financial aid.⁽¹⁴⁾ The other valuable feature is that Kentucky sends out letters to each student after each year of high school telling them the scholarship they have qualified for so far, so every student knows early on that the scholarship exists, how it is structured, the way you can earn more, and their individual progress at each point in their high school career.

The next key question surrounding our policy design choices is how generous do you make it. Providing a larger benefit would do more to encourage students to go to college and also make it easier for them to afford it. Four year colleges have higher graduation rates than two year colleges, but are also more expensive, so one approach to making the scholarship more generous would increase the benefit by 50% for students going to a four year college. If, based on the Kentucky formula, a student earned a \$1,200 scholarship, then perhaps under a Minnesota program, the student could get a \$1,800 scholarship if they went to a 4 year school, or receive a \$1,200 scholarship each year if they went to a two year school. Providing more for a four year school would make these colleges more affordable, and just by offering students a higher benefit, it would push virtually all of them to at least consider what it might take to go to a 4 year school.

As far as costs go, the Kentucky scholarship program costs a little less than \$100 million a year, however, Minnesota has a larger population, so if Minnesota adopted an identical program it would cost the state about \$120 million a year.⁽¹⁵⁾ If the state changed Kentucky's program so it ramped up the cutoff for college grades starting at GPAs above 2.0, then this would increase the number of students receiving some scholarship their second year up to about 90%, but since they would get only a partial benefit, this would increase costs by about 17%, raising the total to about \$140 million a year. If Minnesota then offered a 50% increase for students who went to a 4 year school, this would increase the cost of the program by about 33%, since only two-thirds of students usually go to a 4 year school. This would bring the total cost up to about \$185 million a year.⁽¹⁶⁾ For comparison, Minnesota spends about \$1.4 billion a year on subsidies for the University of Minnesota and colleges in the Minnesota State system.

Conclusion

Creating a new merit based scholarship program based on Kentucky's model could provide Minnesota with some important benefits and help deal with some persistent problems that remain in its system of higher education. First, some long term trends in declining enrollment could be at least partially reversed by providing a new scholarship for those who do well in high school. Second, a Kentucky style program could reduce the racial gaps in school performance, both by increasing high school graduation rates for Black students, but also by encouraging more of them to go to college as well. Third, this additional money for students will help offset some of the rising costs of college in Minnesota and make a college degree more affordable overall. If Minnesota were to make a few modifications to Kentucky's program, then perhaps the state might see the number of Bachelor's degrees awarded increase on top of the rise in Associate's degrees that is likely to take place if Minnesota copies Kentucky's scholarship program precisely. All of this comes at a relatively modest cost that would require a bump in spending on higher education, but would not result in a dramatic overwhelming expansion that is likely to break the budget. Certainly, this approach is worth exploring since it has proven itself to be successful already, and nicely fits as a potential solution to the problems that currently exist in our higher education system here.

End Notes

#1 – Data from the Minnesota Office of Higher Education as reported by MinnPost, indicates that undergraduate enrollment in Minnesota was 20% higher in 2010 than it was in 2016 (excluding Capella and Walden Universities). The article reports that this was due in part because of the improving economy and in part due to demographic factors like lower birth rates and lower migration into the state. Demographically, the projected number of high school graduates was in a bit of dip in 2016, and expected to grow until 2024 at which point it was expected to fall again.

#2 – According to data from the National Center for Education Statistics, for the 2017-2018 school year the Adjusted Cohort Graduation Rate was 88% for White students and 67% for Black students, a gap of 21 percentage points. Only the District of Columbia and Wisconsin had larger gaps in their high school graduation rates.

#3 – According to calculations done by the Center on Budget and Policy Priorities, the average tuition at four year public colleges in Minnesota rose by 23.8% from 2008 to 2018, which is too high, but lower than the increases in most other states over the same time period. The same report indicates that the amount spent per student by the state fell by 5.8% from 2008 to 2018, which ideally should have risen, but is still a smaller decline than most other states in the country (Mitchell et al 2019).

#4 – Information on the structure of the Kentucky Educational Excellence Scholarships (KEES) came from a report by Kentucky's Legislative Research Commission (Seiler et al 2011). The scholarships can be used for up to 5 years after graduation, and for up to 8 semesters for most students, but can be used for 10 semesters if enrolled in an approved 5 year undergraduate program. For students in their second year,

they get to keep their full scholarship if their GPA was above 2.5 in their first year. In their third or fourth years, when the program was first created, students kept their full benefits if their GPA was at 3.0 or above, and got to keep half of their benefit if their GPA was between 2.5 and 3.0. Kentucky changed the rules for students entering their college in the 2009-2010 school year. In the third and fourth year for these students, they received a full scholarship if their GPA was 3.0 or above, or if their GPA was above 2.5 and on track to graduate. If their GPA fell between 2.5 and 3.0, then the student would receive half their scholarship if they were enrolled full time even if they were not on track to graduate. Otherwise, students with GPAs between 2.5 and 3.0 who were not on track to graduate and not enrolled full time lost their scholarship entirely.

#5 – The average Kentucky scholarship of \$1,200 came from a report by Kentucky’s Legislative Research Commission (Seiler et al 2011) as well as the other information about how the program operates.

#6 – According to data from the National Center for Education Statistics, Kentucky’s Average Freshman Graduation Rate (AFGR) rose from 69.7% in the 1999-2000 school year to 77.6% in the 2008-2009 school year, a rise of 8.0 percentage points due to rounding. For the nation as a whole, the AFGR rose from 71.7% in 1999-2000 to 75.5% in 2008-2009, an increase of 3.8 percentage points. There were 7 states that saw their AFGR improve by more than 8.0 percentage points over that same time period. In the 2017-2018 school year, Kentucky had an overall Adjusted Cohort Graduation Rate (ACGR) of 90% compared to 83% for Minnesota. The most recent data available for the Average Freshman Graduation Rate came from the 2012-2013 school year. For all students in that year, Minnesota had a 91% graduation rate according to the AFGR compared to 83% for Kentucky, but when you divide that up by race, Minnesota had a graduation rate of 93% for White students compared to 83% for Kentucky, while Kentucky had a higher rate for Black students of 80% compared to 74% for Minnesota.

#7 – The growth in initial college enrollment in Kentucky and other states implementing a broad based merit aid program comes from my own calculations based on data from the National Center for Education Statistics. The increase in enrollment and improvement in financial conditions for colleges assumes that the effects of the pandemic ultimately subside and the educational environment for colleges and universities largely returns to normal.

#8 – Based on my own calculations using data from the National Center for Education Statistics, the percent of 20 year old who received an Associate’s degree rose from 11.9% in the 1998-1999 school year up to 18.9% in the 2008-2009 school year, an increase of 7.0 percentage points. Nationwide this number increased from 14.5% in 1998-1999 to 18.9% in 2008-2009, an increase of 4.4% percentage points. According to the Kentucky Legislative Research Commission (Seiler 2011), in 2010, tuition, fees, and room and board costs at 4 year public colleges rose to about \$14,500 (or about \$7,000 a year including only tuition and fees) compared to tuition at fees and community colleges which were about \$3,000 a year.

#9 – Based on my own calculations using data from the National Center for Education Statistics, the percent of 22 year old receiving bachelor’s degrees rose from about 30% in the 1998-1999 school year just before the scholarships began, compared to 35% in the 2008-2009 school year, an increase of 5

percentage points. Nationally this same statistic rose from 34% to 39% over the same time period, which also represents a 5 percentage point increase.

#10 – University of Michigan professor Susan Dynarski (2004) reports that in 1999 about 40% of high school seniors earn a GPA of 3.0 or above and about 60% of high school seniors earn a GPA of 2.5 or above. Money magazine reports that about half of Georgia's merit based scholarship recipients and about 40% of Tennessee's recipients lose their scholarships before their senior year, and they have a GPA cutoff of 3.0. The Money magazine article also reports that a student's GPA declines by about 0.47 on average from high school to college. About 61% of merit based scholarship recipients in Kentucky use their award to go to college in the first year after graduating, but only about 38% of them use the scholarship in their second year after graduation (Seiller 2011).

#11 – If a strict college GPA cutoff at 3.0 allows about 50% to 60% of all students to keep their full benefit (see end note #10), then offering students with a GPA between 2.5 and 3.0 half their scholarship would allow perhaps 70% to 80% keep some benefit, and would cost the same as offering 60% to 70% of students their full benefit. Lowering the cutoff to get some benefits to a GPA of 2.0 and phasing it in more gradually allows perhaps 90% of all students to keep at least part of their scholarship, and this would cost the same as offering a full benefit to 70% to 75% of all students. This means the total cost is likely only going to go up between 7% (.75/.7) and 17% (.7/.6), and I assumed an increase of 17% just to be on the safe side.

#12 – See end note #4 for more details on how Kentucky changed their GPA cutoff for students earning GPAs between 2.5 and 3.0.

#13 – In her early analysis of the impact of merit aid programs, Professor Dynarski (2004) found that even though Georgia's merit based program had a larger effect on increasing college enrollment for White students than for Black and Hispanic students, three other merit based programs in Arkansas, Mississippi, and Florida saw that the increases in college enrollment were larger for Black and Hispanic students than for White students.

#14 – The Kentucky merit based scholarships are determined separately from other forms of financial aid, so receiving a Kentucky scholarship should not reduce the amount of other state and federal aid a student gets. It is possible that the college or university system itself might offer less aid knowing a student is also getting a Kentucky scholarship, but aid coming from government programs themselves should remain unchanged.

#15 – The report from Kentucky's Legislative Research Commission (Seiler 2011) indicates that the Kentucky Educational Excellence Scholarship cost about \$95 million a year in 2011. Adjusted for the relative size of each state's population, this means an identical scholarship program would have cost about \$120 million in Minnesota. The parameters for the college scholarships have not been adjusted for inflation in Kentucky.

#16 – See end note #11 for an explanation of how much costs would go up if the cutoff for college grades were lowered and phased in. If a program in Minnesota would cost about \$120 million after

adjusting for population, increasing that by 17% would raise the cost to about \$140 million. Increasing that again by 33% by offering more aid to students going to 4 year colleges would raise the total cost to about \$185 million a year.

References

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