OVERVIEW

Across states, there is a growing interest in funding the outcomes of education, as opposed to the inputs. To facilitate further conversations and inform potential state actions, Excel*in*Ed developed a financial modeling tool. It helps state policymakers understand the financial implications of performance funding (i.e., funding districts to some degree based on how well their students are doing). The tool does not restrict policymakers to one way of doing performance funding but instead allows them to explore alternatives on key design issues. Based on these decisions, it then compares overall funding under a performance funding system to the existing, enrollment funding system for an entire state. It also calculates the return on investment. To examine equity, it shows impact on at-risk students and on districts that have a high percentage of at-risk students.

This issue brief provides a brief rationale for performance funding and utility of the modeling tool, describes the core elements of the modeling tool and shares some important findings from early use of the tool. A separate paper provides more details on the research behind performance funding and how best to design it for optimal results. These materials were prepared with the help of Dr. Larry Miller, the nation's foremost expert on performance funding in K-12 education, and with the generous support of the Jaquelin Hume Foundation.[1]

Why Performance Funding?

There are two major reasons why state policymakers are considering performance funding in K-12 education. First, it is more sensible to pay for what really matters: outcomes in terms of student performance and success, as opposed to inputs like seat-time. Indeed, there is broad agreement that linking payment to performance creates an incentive for better performance, and in fact, this has happened in higher education and other industries. In other words, performance funding should result in better outcomes for students as districts are more motivated to do what it takes for their students to succeed.

Second, the focus on outcomes allows policymakers to worry less about the inputs, like the number of hours of instruction or class size. As a result, districts are freed to innovate. One area of particular relevance is mastery-based approaches to personalized learning, where students progress only when they demonstrate mastery of curricular content and applications. In a mastery-based system, teachers meet students where they are, and students demonstrate mastery at varying paces. Seat-time funding does not currently account for or support these mastery-based progressions. Some leading states are finding ways around the existing funding system, but enrollment-based funding provides neither an incentive for districts to personalize learning nor the resources districts need to implement it effectively.[2]

Key Issues to Address

Even as policymakers contemplate performance funding in K-12 education, two important questions arise. The first is about financial affordability and predictability for the state budget. At a statewide level, student enrollment does not typically bounce up or down by significant percentages each year. Under performance funding, what happens if 20 percent more students succeed than anticipated?

The second is about equity, focusing on whether districts with lower performance and more disadvantaged students will lose funding, hurting the ability of these districts to turn themselves around. How can states ensure that districts have an incentive to serve the neediest students and the resources needed to serve these students well?

The modeling tool developed by Excel*in*Ed helps policymakers address these questions, while also allowing them to customize options based on their state funding priorities and limitations.

MODEL OVERVIEW

The modeling tool developed by Excel*in*Ed uses state-level data from Florida (Algebra course results) as the basis for performance funding results. Florida was selected because its funding formula is relatively straightforward, with nearly all funding provided on a per-course basis, and state and local funding are almost fully incorporated in the formula. In addition, Algebra I is taken by almost all students in middle or high school. For this course in Florida, there is an independently graded end-of-course exam with readily available passage-rate data for all students and for at-risk students. Linking funding to passing this exam means that districts cannot receive additional funding by lowering the academic bar.[3]

How It Works

The model starts by calculating how much funding districts across the state are getting for students taking Algebra I each year through the existing, enrollment system. It then provides several options for policymakers in designing a performance funding system, including:

- The percentage of overall funding that is performance based. The tool gives low, medium and high options. The remainder is distributed using the enrollment system;
- Weights, or additional funding, for students who are at risk of not passing the Algebra I exam; and
- Whether the performance funding comes in whole or in part out of existing enrollment funding amount or is on top of that funding.

The model also allows policymakers to attach funding to different types of student outcomes, including:

- Successful completion of an entire course, as measured by an end-of-course exam and/or a passing grade. Florida uses this "high stakes" method for its online charter school;
- The percentage of assignments successfully completed. New Hampshire uses this "low stakes" method for its online charter school; and
- Successful completion of "units" or "learning targets" that make up a course. This approach is consistent with how districts and schools that are implementing mastery-based instruction organize their instruction.[4]

The model then shows how much funding districts across the state would receive under the performance funding system. It highlights impact on at-risk students.

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[4] For more on these different approaches, see Larry Miller et al, *Low-Stakes Completion-Based Funding* (2016). Policymakers can also use the tool to link performance to the success of a student over multiple years or even post-graduation in college and careers.

INITIAL FINDINGS

Use of the modeling tool sheds important light on the two major questions about affordability and equity discussed above.[5]

Overall Impact on Funding

As indicated above, state policymakers are more likely to implement performance funding with better understanding of the potential financial implications on the state budget. The modeling tool shows that performance funding does not inherently increase funding or make it less predictable, for several reasons.

First, 61 percent of students currently pass the end-of-course exam, whereas, districts currently get funding for 100 percent of students in the enrollment funding system.[6] As a result, when performance funding is based on the current funding per course, it is naturally lower. The model shows that this is the case even when assuming that performance funding results in higher course success rates.

Second, only a small portion of funding will likely shift to performance. The model provides three options: 5, 10 and 15 percent. These options are based in the research about how much funding is needed to create an incentive without financial hardship.[7] At these percentages, the impact on the state budget is significantly muted.

Third, the model shows that the state can either take performance funding out of the traditional funding that districts are receiving, have it come on top of the existing funding, or some combination thereof. The more the funding comes out of the existing funding, the lower the overall financial impact.

Finally, policymakers can create a fixed performance funding pool. The funding amount per successful student adjusts upward or downward depending on how many students succeed statewide each year, with total funding staying within the pooled amount. Individual school districts always receive more funding if more of their students succeed, but the amount per success can change. The tool shows that, even if student success is much higher than expected, the pool feature keeps the budgetary impact unchanged.

Impact on Student Success and Return on Investment

Based on research on performance funding, the tool anticipates increased student success.[8] The impact increases as the performance funding is higher. The tool shows how districts can afford to let students accelerate through the course, pass the exam and then continue to another, more advanced course. For at-risk students, it shows how districts have an incentive to invest in having these students succeed, rather than passing them with skill deficits.

The modeling tool allows policymakers to consider not only overall funding but whether performance funding results in the state getting more for its money. It uses two measures. First, it measures the number of course successes per $1 million in funding, under enrollment and performance funding. Second, it calculates a return on investment as the cost for each additional course success.

The tool shows that performance funding increases the number of course successes per $1 million. Indeed, the return on investment calculated through the tool is conservative as it does not include the long-term financial benefits to the

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[5] For screenshots of the modeling tool, see the Appendix.
[6] Data is for the 2017-18 school year retreived from Florida Department of Education's PK-12 Education Information Portal.
[7] Some states are using higher percentages in higher education and with online K-12 schools.
[8] This reflects a review of the research by Dr. Larry Miller. See, e.g., M.K. Rodgers et al, *Early Learning Performance Funding Project: Final Evaluation Report 2016-2017* (2017).

state of more students succeeding in high school, which leads them to higher wage jobs that provide more revenue to the state.

Equity Impact

The modeling tool examines the financial impact for at-risk students, which include both students who are economically disadvantaged as well as those who are less likely to succeed in the course based on prior performance. To address equity concerns, the tool allows additional funding, or a weight, for at-risk students. This weight means that districts get more funding when at-risk students succeed in the course.

With a typical weight, the tool shows that performance funding does not financially harm at-risk students or districts that have a high proportion of at-risk students.[9]

CONCLUSION AND NEXT STEPS

The tool shows policymakers that they can implement performance funding without wild financial fluctuations. It shows performance funding providing a positive return on investment (i.e., more students are succeeding with the same funding). It also shows how policymakers can address equity concerns, so that at-risk students are helped.

Excel*in*Ed hopes that this tool and the accompanying materials will help policymakers as they consider the shift from enrollment to performance funding. This is the beginning of a longer conversation about how to ensure that state funding incentivizes better outcomes, provides flexibility to innovate and addresses the needs of all students equitably. Excel*in*Ed stands at the ready to work with policymakers as they consider these issues in the specific contexts of their states.

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[9] The tool uses the average for states that have a funding weight for at-risk students, with an option to use a lower or higher weight.
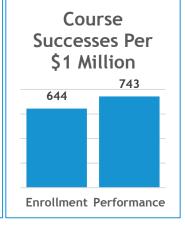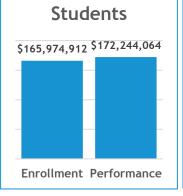
APPENDIX: PERFORMANCE FUNDING MODELING TOOL SCREENSHOTS

Performance Funding Modeling Tool				

Key Inputs

Enrollment Funding				
Base Course Funding Per Student for Algebra I				$945
Existing Weight for At-Risk Students (1.00 = no extra)				1.00
Current Course Success Rates--Algebra I				
General Students (Not At-Risk)				93%
At-Risk Students				52%
Performance Funding	Low	Medium	High	Actual
% of Overall Funding	5%	10%	15%	10%
Impact Based on % of Funding	Low	Medium	High	Unadj. Impact
On General Students	5%	15%	20%	15%
On At-Risk Students	8%	23%	28%	23%
Weights for Student Subgroups	Low	Medium	High	Actual
For At-Risk Students	1.00	1.22	1.42	1.22
Impact Adjusted for Weights	Low	Unadj.	High	Adj. Impact
On General Students	15%	15%	15%	15%
On At-Risk Students	15%	23%	29%	23%
Potential Performance Funding Pool				$21,016,899
What percent comes from enrollment funding vs. add-on?				50%
Is performance funding capped at available pool?				Yes
Total # of Course Successes				163,000
Performance Funding	Enroll.	Capped	Higher	Actual
Per Course Success	$95	$106	$127	$106
Total # Performance Units Per Course				1
Likely Performance Funding	Base	Weight	Units	Funding
General Students	$106	1.00	1.07	$113
At-Risk Students	$106	1.22	0.64	$83
Differential: General v. At-Risk Students				26.6%

Key Outputs

Total Enrollment Funding	$210,168,990
Total Performance Funding	$219,514,505
Funding Impact Per Course	$9,345,515
Course Successes--Enrollment	135,349
Course Successes--Performance	163,000
Impact on # of Course Successes	27,651
Course Successes Per $1 million--Enrollment	644
Course Successes Per $1 million--Performance	743
Impact on Course Successes Per $1 million	15.3%
Change in Funding--Investment	$9,345,515
Change in Course Successes--Return	27,651
Cost Per Additional Course Success	$338
Enrollment Funding--At-Risk Students	$165,974,912
Performance Funding--At-Risk Students	$172,244,064
Funding Impact--At-Risk Students	$6,269,152
Course Successes, At-Risk Students--Enrollment	91,857
Course Successes, At-Risk Students--Performance	112,984
Impact on Course Successes, At-Risk Students	21,127
Successes Per $1m, At-Risk Students--Enrollment	553
Successes Per $1m, At-Risk Students--Perf.	656
Impact on Successes Per $1 million, At-Risk Students	18.5%
Perf. Funding Per Student for District w/ Low At-Risk	$1,005
Perf. Funding Per Student for District w/ High At-Risk	$987
Difference Between Low & High At Risk Districts	-1.8%

Funding: Enrollment v. Performance — Enrollment $210,168,990, Performance $219,514,505

Course Successes Per $1 Million — Enrollment 644, Performance 743

At-Risk Students — Enrollment $165,974,912, Performance $172,244,064

At-Risk: Successes Per $1 Million — Enrollment 553, Performance 656