CENTER FOR GLOBAL DEVELOPMENT

The Evolution of World Bank Lending for Education: 1998–2022

Biniam Bedasso and Justin Sandefur

Abstract

In 2011, the World Bank's new education strategy stressed the need to shift focus from schooling (access or enrollment) to learning (test scores), and specifically towards foundational skills acquired in primary school. But this shift is not always easy to see in the actual lending data. Coding new details on 25 years of World Bank education loans and grants, we find a decline in the share of financing for primary school over the whole period, and no apparent increase in the share of projects targeting "quality" or "learning" as opposed to "access" since 2011. In contrast, there has been gradual but steady growth in projects targeting early childhood education. These pattterns appear to reflect both supply and demand side factors. On the demand side, as primary enrollment increases, countries shift their borrowing toward early childhood education. On the supply side, the World Bank is significantly better at delivering early-childhood education programs compared to projects focused on raising test scores, as judged by independent evaluation scores. Evidence on the long-term learning gains from preschool suggest this may be a more feasible strategy for the World Bank to achieve its goals.

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1. Introduction

Over the past two decades, as school enrollments and education expenditures in the developing world have steadily increased, the relative importance of World Bank lending for education has declined, at least in dollar terms. The institution's education portfolio grew roughly four-fold from 1999 to 2022, totaling $73 billion in support for education projects in 160 countries and 25 regional states (World Bank, 2023). But this has not kept pace with public spending on education in low- and middle-income countries, which grew about seven-fold over the same period.[1]

As the Bank's relative financial heft in education has declined, its education policy agenda has evolved from providing basic material inputs to education systems to improving learning outcomes through ambitious systemic reforms (Mundy and Verger, 2015). The most recent education strategy of the Bank, adopted in 2011, emphasizes the need to shift focus from schooling to learning. The strategy aims to promote learning, both in and out of school, from preschool through the labor market (World Bank, 2011). In comparison, the previous strategy, adopted in 1999, prioritized inclusive access to basic education and improving quality through early interventions, innovative delivery and system reform (World Bank, 1999). The Education Sector Strategy Update in 2005 retained the 1999 priorities but sought to embed them in broader economy-wide context with explicit focus on results-orientation (World Bank, 2005). The notion of the "learning crisis" as the key element of the Bank's central narrative on education has been strengthened due to the focus it received in the 2018 World Development Report (World Bank, 2018). The evolution of the global discourse in education in the past few decades shows that the Bank's influence as an international agenda-setter emanates from its unique role as a lender and knowledge broker (Edwards et al., 2023).

Does World Bank lending for education match this rhetorical shift in policy priorities? Has the allocation of bank finance across sub-sectors and activities within education evolved in line with the much celebrated pivot from "schooling" to "learning"?

In this paper, we attempt to analyze various aspects of the evolution of World Bank financing for education over the past two and a half decades against the backdrop of the shift in strategy as well as broader narrative. We construct a novel dataset on the thematic focus of World Bank education projects by coding the Project Development Objectives (PDOs) of 815 projects implemented between 1998 and 2022. Additionally, a large subset of the PDOs were mapped to the actual project activities, offering insights into the practical manifestations of the objectives in the form of investments on the ground. Our data spans the years during which the Millennium Development Goals (MDGs) were adopted and subsequently evolved into the Sustainable Development Goals (SDGs), which significantly enhanced the Bank's global role in funding human development initiatives.

1 According to the World Bank's World Development Indicators, government expenditure on education as a percentage of GDP in all low- and middle-income countries was 3.3 percent in 1999 and 3.6 percent in 2022, while total GDP for the same countries increased from $6 trillion to just above $39 trillion. That implies growth of public spending on education from about $200 billion to around $1.4 trillion.

In absolute terms, the data shows that the past two decades were characterized by a steady increase in World Bank financing of education projects, mirroring the significant expansion in overall World Bank lending. In terms of sectoral composition, the share of financing for primary education declined by around one-third between 1998 and 2022. The most substantial growth was in the share of projects focused on early childhood education (ECE), which increased by a factor of 2.5 times between the first and last World Bank education strategies (i.e., 1998-2005 vs 2011-2022). As for thematic objectives, expanding access to education has remained the dominant focus, accounting for an average of 25.6 percent of World Bank education lending under the most recent strategy, despite a decline from a share of 29.3 percent prior to the 2005 strategy. Other objectives, in decreasing order of their portfolio share are quality, governance, attainment, learning outcomes and employability. Notably, the average share of projects targeting "learning outcomes" has declined after the adoption of the "Learning for All" strategy in 2011 in contrast to a significant increase in the previous period. In terms of equity and wellbeing, interventions targeted at underrepresented groups and women increased dramatically while activities enhancing overall wellbeing in school stagnated.

One of the drivers behind the persistence of access as a dominant objective for World Bank education projects is the tendency of countries to shift borrowing to expanding access in other subsectors as primary enrolment increases. Borrowing countries that have already attained significant increases in primary enrolment seem to prioritize expanding ECE as they tap subsequent World Bank financing. Apart from the sequencing choices of borrowing countries, the performance of different types of education projects as determined by the Independent Evaluation Group may have influenced the trends in the allocation of financing. Particularly, the relatively low scores projects targeted at learning outcomes received upon completion may have contributed to a shift in subsequent lending towards other objectives. Similarly, the relatively high scores of ECE projects could be part of the reason ECE has seen the highest rate of expansion in financing over the period covered by our data. A review of the main factors influencing differential ratings among various project types, as outlined in evaluation documents, reveals a pattern: substantiating the attainment of learning outcomes targets proves typically more difficult than achieving access targets over the standard project lifespan.

The World Bank's stated objectives for a project are not meaningless labels. We find a significant correlation between the type of objective and the activities financed by the project. Projects with an explicit focus on learning outcomes often involve more activities related to assessments and curriculum than projects focusing on access. Conversely, projects aimed at attainment or learning outcomes are less likely to include activities focused on equity and inclusion. However, the choice of project activities also appear to be influenced by the identity of the World Bank staff member responsible for project preparation. We find that the identity of the "Task Team Leader" explains the selection of activities related to "equity and inclusion", "curriculum and textbooks", and "management information and data" as well or better than the country the projects are located in.

Overall, the main results of the paper reveal that the World Bank's financing portfolio is more complex than the dominant narratives might suggest. The trends in the composition of projects are likely to have been shaped by the interaction between supply and demand forces. The findings regarding projects aimed at improving learning outcomes point to the need for the Bank to reevaluate how its lending operations could effectively support its declared mission of combating learning poverty. There seems to be significant momentum for the Bank to build on its success in effectively delivering ECE projects and respond to the growing demand for ECE investment from borrowing countries. ECE investments typically entail boosting early access to education and stimulation, ultimately creating a conducive environment to improve learning outcomes in the future. In this context, ECE represents an area where the World Bank has the potential to significantly enhance its impact on long-term educational outcomes by harnessing its existing capabilities in delivering access projects.

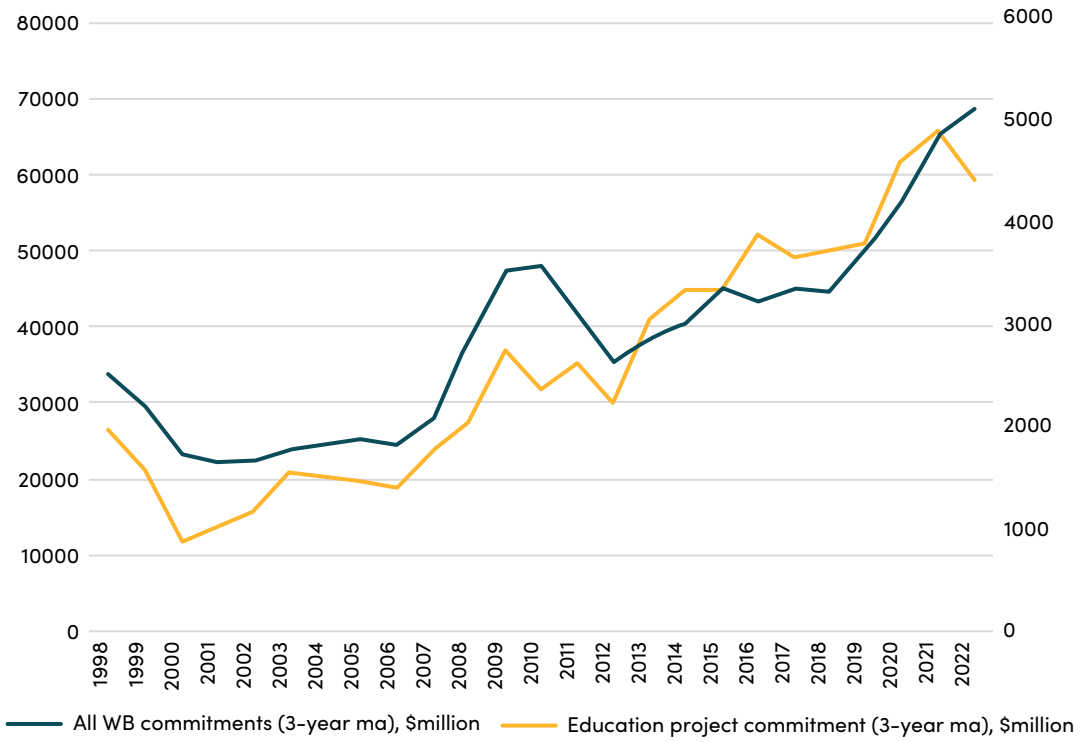
One limitation to our analysis is that it is done, by necessity, at the project level, and each project spans multiple objectives and activities. We cannot ascribe a specific dollar value to each objective in projects with diverse goals. Consequently, each objective indicated in the PDO is assigned an equal share of the monetary allocation for the project from the World Bank in calculating the percentage share of objectives in a given year. Similarly, the IEG ratings are applicable to all objectives within the project, making it challenging to directly measure the performance of a particular objective. Therefore, the performance on a particular objective is only measured indirectly in relation to the performance of other projects that do not include that objective. A further caveat is that the activities database we used in conjunction with the PDO dataset does not extend beyond 2017, leaving out recent years in which significant movements in the composition of objectives took place.

The remainder of the paper is organized as follows. Section 2 provides an overview of the key trends and patterns that have characterized World Bank's financing for education over the past 25 years. Section 3 offers explanations for the observed trends, focusing on the demand-side of the education financing decision. Sections 4 and 5 look at the supply-side, analyzing what kinds of projects the World Bank deems itself to be good and bad at executing. Section 6 examines a different aspect of the supply side, i.e., how much individual World Bank staff determine the type of education projects countries borrow for. Section 7 concludes.

2. A quarter century of expansion and oscillating priorities[2]

The past 25 years have seen significant increases in the allocation of World Bank financing for education. This trend has mirrored the overall expansion in World Bank lending in all sectors over the same period (see Figure 1). The number of approved education projects has doubled during this period, while the total financing value has quadrupled. This indicates a substantial increase in the average commitment per project. Although a mix of various lending instruments have been used over the years, education financing has been dominated by specific investment lending which is usually targeted at projects of medium- to long-term horizon. As the Millennium Development Goals period (i.e. 2000–2015) coincides with the years covered by our review, the ramping up of education lending could be partly attributed to the global drive to help low- and middle-income countries achieve the education goals.

FIGURE 1. World Bank's education financing expanded significantly over the past two and a half decades

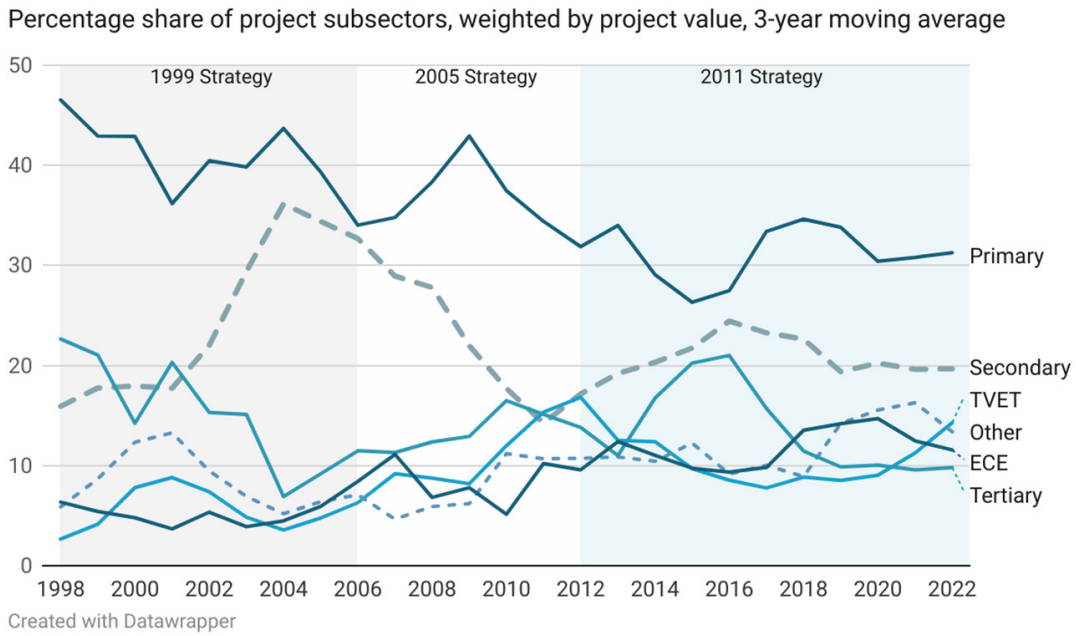


Primary education projects have accounted for the largest share of financing over the entire period. However, Figure 2 shows that the relative share of primary education has declined significantly, by roughly a quarter between the earliest and the latest sector strategy periods during the past 25 years. The share of secondary education, which typically represents the second most popular area of

2 The methodology used for constructing the dataset for this analysis is presented in Appendix 1.

investment, experienced an initial rise, approaching levels similar to primary education. However, it gradually declined thereafter. The two areas that have witnessed a relatively consistent increase in the share of World Bank financing since the early 2000s are ECE and "other education" (including public administration). Particularly, the share of ECE in the education portfolio has tripled over the past 25 years. Considering the narrow age range ECE covers, this is a fairly significant shift in the allocation of resources towards early interventions and school readiness.

FIGURE 2. The share of financing for primary education has declined while the shares of other sub-sectors have fluctuated



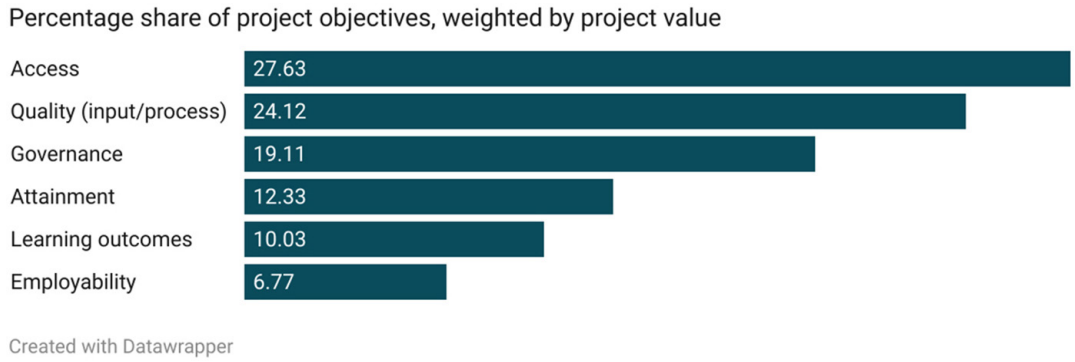
Notes: Subsector designations are not mutually exclusive as projects often cover multiple education subsectors. Therefore, this graph is based on both the primary and secondary subsectors of a project. This means a project that focuses on multiple subsectors, for instance primary education and ECE, is represented under all relevant categories. The percentage share of each subsector for a given year is weighted by the total value of World Bank commitment for projects associated with that subsector in that particular year.

Projects aiming to expand access to education take the largest share of financing as shown in Figure 3.[3] These include projects targeted at all levels of education from preschool to university as long as they seek to increase access. The second most popular area of financing over the past two decades has been improving the quality of education through investment in inputs and processes. The two objectives often coexist in a single project, with over 26 percent of projects aiming to expand some type of access while also improving input quality. Similarly, there is substantial overlap between quality and governance objectives. Around 18 percent of projects in our dataset aim to

3 The coding of objectives was exclusively based on the Project Development Outcome statements (PDO) of the projects in our dataset. The advantage of using PDOs is that they are reported across all projects, and are used from design to evaluation to define project goals.

improve the quality of the teaching and learning process directly as well as build better education governance capacities.

FIGURE 3. Expanding access has been the dominant objective of World Bank's education financing between 1998 and 2022



Notes: Most projects are designed to address multiple objectives. Therefore, a single project could be counted as many times as it has distinct objectives. The percentage share of each objective is weighted by the total value of World Bank commitment for projects associated with that objective.

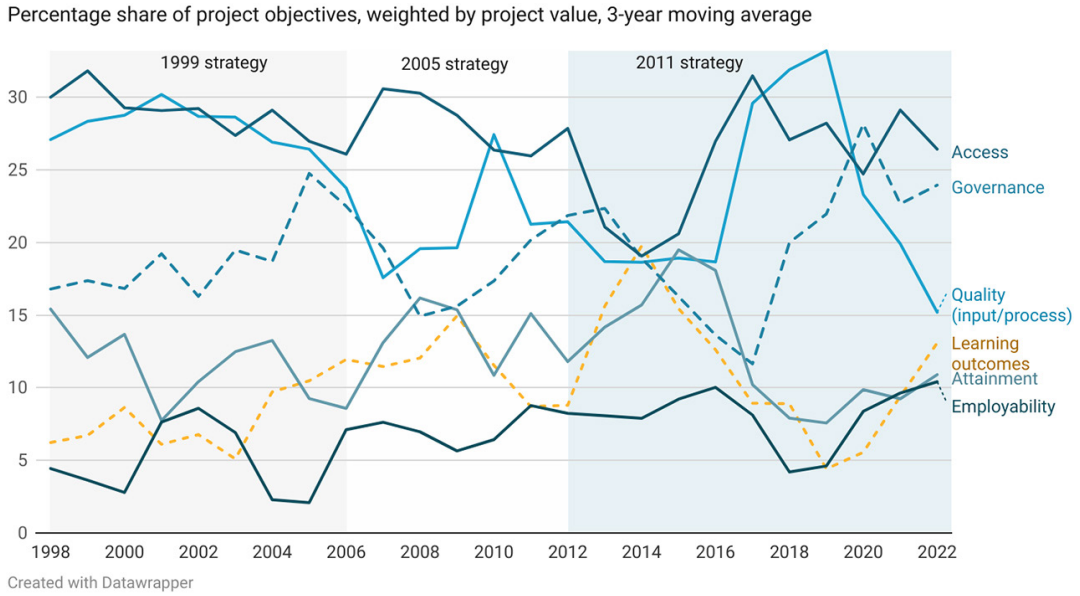
When coding the PDOs, we distinguish between projects that aim to improve input quality and projects that go further to explicitly target specific outcomes.[4] Projects focusing on outcomes can be further divided into two categories: those aiming to increase educational attainment (retention, completion, and lower dropout rates) and those aiming to improve learning outcomes. The distinction between "quality" in the generic sense and "learning outcomes" as an explicit focus area is particularly important because it is a key part of the narrative that gave impetus to the emergence of "learning" as the central de jure focus area of the Bank in the post-2011 period. In this regard, it is useful to note the remark made in the Bank's own evaluation of its support for primary education concerning the relatively low number of projects aiming to improve learning outcomes: "this does not mean that projects were unconcerned about quality: almost all aimed for improvements in educational quality, but until recently this was mostly seen in terms of delivery of inputs and services" (IEG, 2006: 2).

Over the 25 years covered by our data, 12 percent of projects focused on increasing educational attainment whereas only 10 percent have explicitly specified some sort of learning related objective as part of their PDO. There is a significant overlap between learning outcomes and access objectives, with approximately 45 percent of projects focusing on learning outcomes also having an access related objective. In contrast, only one in five projects with learning outcomes as an objective also mentions the quality of inputs or processes in its PDO. This suggests that "learning outcomes"

4 The Independent Evaluation Group also made a similar distinction between "quality of education inputs or services" and "learning outcomes" as separate objectives in the portfolio review it produced as an input for the 2011 World Bank education strategy (see IEG, 2011).

and "quality" are usually conceived as substitutes, with the former being more specific and the latter generic.

FIGURE 4. The share of projects targeting "quality" or "learning" as opposed to "access" shows no clear trend over the medium term



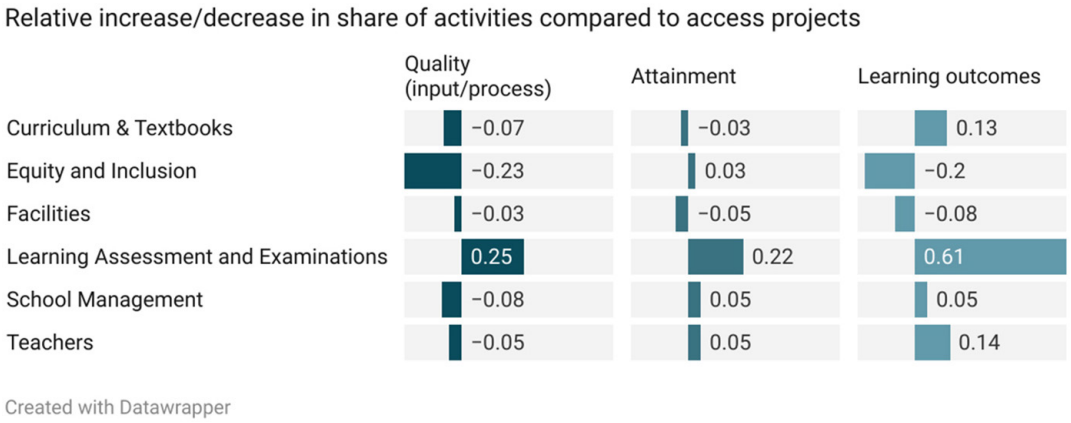
Notes: Most projects are designed to address multiple objectives. Therefore, a single project could be counted as many times as it has distinct objectives. The percentage share of each objective for a given year is weighted by the total value of World Bank commitment for projects associated with that objective in that particular year.

For most of the years covered by our data, access has been the most common focus area, although its average share has declined slightly over the past two strategy periods since 1998. Figure 4 shows that the thematic composition of the portfolio has been characterized by significant fluctuations. Generally, there is a negative correlation between output-focused objectives (such as access and quality) and outcome-focused objectives (such as attainment and learning outcomes). Notably, in the mid-2010s, there was a significant drop in the share of financing for access, quality and governance projects coupled with a corresponding increase in focus on attainment and learning outcomes. For instance, around 2015, projects with learning outcomes as an objective had a higher share than any other project type.[5] However, this trend had subsequently reversed, with a significant increase in access and input quality as the main focuses of World Bank education projects. The last few years have witnessed a marked increase in the share of projects targeting learning outcomes from a trough of 4.5 percent in 2019. This increase may have been driven by efforts to tackle learning loss due to COVID-19. But, on average, the share of projects devoted to raising learning outcomes has actually declined marginally since the 2011 strategy on "Learning for All", as compared to its share during the period covered by the 2005 strategy.

5 This spike in learning outcomes projects may have occurred in response to the adoption of the "Learning for All" strategy in 2011 whereas the later increase around 2020 could be attributed to a combination of COVID and the publication of the 2018 World Development Report.

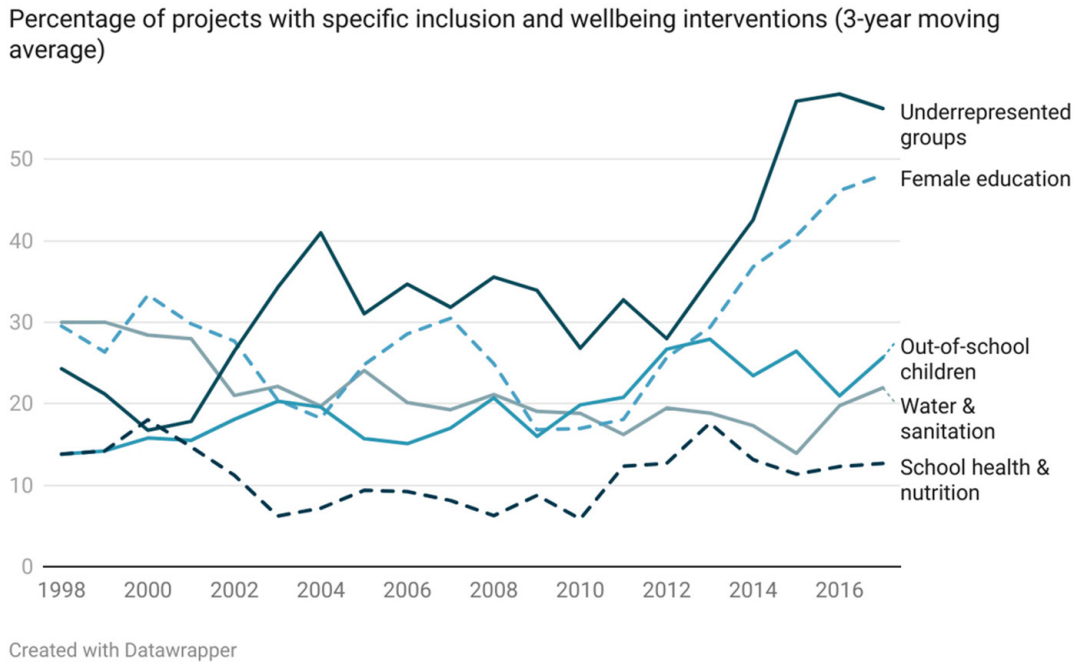
PDOs are expected to encapsulate the essence of a project in a few sentences. But how is the choice of objective correlated with what World Bank projects actually finance? The answer often lies in the composition of project activities. Figure 5 shows that projects with a focus on learning outcomes feature 61 percent more activities associated with learning assessment and examinations than access projects. In contrast, access projects involve 20 percent more activities related to equity and inclusion than projects focusing on learning outcomes. As expected, access projects place greater emphasis on facilities related activities than projects focusing on quality or more specific outcomes. The results also provide confirmation that projects that are coded as focusing on learning outcomes are more clearly aligned with activities that are typically associated with improving education quality than projects tagged as focusing on input/process quality. Projects focusing on attainment, on the other hand, are shown to represent efforts to improve outcomes at the same time as providing equitable access to schooling.

FIGURE 5. Explicit focus on learning outcomes often implies more project activities involving assessments, teachers and curriculum



In addition to trends in the thematic objectives of projects, the strategic orientation of World Bank financing of education is also manifested in the distribution of project activities that target specific population groups or aim to enhance wellbeing within educational settings. Figure 6 shows that the past decade has witnessed a significant increase in the share of projects that feature one or more interventions targeting underrepresented/marginalized groups or women. Particularly, the steep increase around 2011 may have been, at least in part, motivated by the adoption of the "Learning for All" strategy that has brought inclusion to the fore. As of 2017, around 1 in 2 projects has activities targeted at underrepresented groups (such as poor households and ethnic minorities) or women or both. The share of projects with activities targeted at out-of-school children also increased since the late 1990s, albeit the increase appears to have plateaued around 2013.

FIGURE 6. Interventions targeted at underrepresented groups and women increased dramatically while activities enhancing wellbeing in school stagnated



Regarding activities that enhance the wellbeing of students within the school environment, such as school meals, water and sanitation, and health interventions, the trends indicate a noticeable decline or overall stagnation. The percentage of projects financing water and sanitation in schools decreased significantly between 1998 and 2017. As of 2017, the highest incidence of school health and nutrition interventions occurred in the early 2000s. There was a slight increase in activity around 2013, likely driven by the growing interest of low- and middle-income countries to establish national school feeding programs. However, since then, the momentum appears to have slowed down.

3. Reaching higher or younger: what do countries borrow for as they approach universal primary enrollment?

As many low- and middle-income countries approach universal primary enrollment at the same time as concerns about poor learning outcomes grow, it might be useful to examine how demand for World Bank financing shifts with level of development. Such analysis could shed light on what might be driving the trends documented in the previous section, particularly the persistence of access as the dominant objective and the decline of the share of primary education. Thus, we analyze the link between project choice and objective indicators of educational development such as enrollment rates to capture the pattern of project sequencing across various phases of progress.

In Table 1, we estimate the correlation between primary enrollment rate and the education level for which countries borrow from the World Bank to examine the potential impact of expanding access at

the primary level on priorities for subsequent project financing. Specifically, we look at the allocation of World Bank financing across ECE, primary and secondary levels with respect to average net primary enrollment rate in the three years prior to project approval. We also control for per capita GDP as a key indicator of overall level of development.

The data for this analysis covers the three decades between 1990 and 2021, allowing us to capture variations in primary enrollment over a reasonably long period in which access has expanded globally.[6] The dependent variable indicates whether a project focuses on primary, secondary or early childhood education as the first or second subsector. We also have a separate category for projects focusing on both primary and secondary education. This is important because a large proportion of projects combine these two subsectors and, in the presence of increasing primary enrollment, such projects could potentially represent efforts to improve quality of primary education while expanding access to secondary education.

TABLE 1. Expanding access to primary schooling is associated with a decline in borrowing for primary education and an increase in borrowing for ECE and secondary education

	Choice of Subsector for World Bank Financing								Overall Government Spending by Subsector	
	Primary Only		Primary & Secondary		Secondary Only		Early-Childhood Education		Share of Gov. Expend. on Primary	Share of Gov. Expend. on Secondary
Net primary enrolment	–.012***	–.012***	.0004	.0005	.006**	.007***	.005**	.004*	–.032	–.033
	(.002)	(.022)	(.002)	(.002)	(.002)	(.002)	(.003)	(.002)	(.028)	(.027)
Per capita income (natural log)	–.078	.045	–.078	.033	–.087	–.164	.244***	.085	–6.74***	1.26
	(.105)	(.128)	(.108)	(.137)	(.103)	(.140)	(.081)	(.114)	(1.38)	(1.35)
WB strategy/ Year FE	No	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	395	395	395	395	395	395	395	395	1516	1502

Notes: ***, ** and * indicate significance at the 1%, 5% and 10% level, respectively. Standard errors are shown in parenthesis.

The results in Table 1 show that an increase in primary enrollment is associated with a decrease in the likelihood of borrowing for primary education. More precisely, a 10 percent increase in net primary enrollment is associated with a decrease in the probability of borrowing for primary education by 12 percentage points. There is little evidence, however, that countries continue to borrow for primary education while they also increase their focus on secondary education as primary enrollment expands. On the contrary, there is a significant probability of countries shifting their borrowing towards projects that exclusively concentrate on secondary education as the primary enrollment rate rises. Similarly, countries tend to borrow more for ECE when access to

6 The World Declaration of Education for All was adopted in 1990.

primary education expands. While this could be partly attributed to countries that have successfully increased net enrollment also being able to afford early childhood education, the fact that the effect is estimated independently of per capita income suggests a recognition that enhancing quality begins with interventions in early childhood.

Some of these results could potentially be driven by changes in World Bank lending priorities which are supposed to be aligned with the overall sector strategy. However, Table 1 shows that the results are largely robust to the inclusion of an indicator variable for the two World Bank education strategies that have been in place since 1999. This means, even though the supply of World Bank financing to different sub-sectors of education might have changed with the adoption of a new strategy, the underlying relationships discussed above are likely to have been caused by demand-side factors. It is also shown that the specific relationship between sub-sector financing and primary enrollment does not hold in the case of overall government spending. In other words, the share of government spending on primary education does not necessarily decrease as access to primary education expands. However, what the results in Table 1 show is that the type of new investment that is often financed through World Bank projects declines.

Given that the correlations in Table 1 are influenced by between-country variations as much as within-country variations, analyzing the pattern of switching or persistence in the sectoral focus of sequential project cycles in a given country could help to validate the preceding results. Appendix 2 presents the results of the cross-lagged panel analysis linking within-country project choices over time. At the country-level, on average, there is a considerable continuity in borrowing for most sub-sectors including primary education and ECE in the medium-run. The high degree of persistence in borrowing for primary education is likely to be driven by countries that are still expanding access to primary education. However, the most notable finding, from the point of view of sequencing of financing, is that there is a statistically significant propensity to switch from borrowing for primary education to borrowing for ECE. This result further strengthens the argument that client countries shift World Bank financing to ECE as access to primary education expands.

The decision to focus on ECE might be influenced by the rising political appeal of expanding preschool access in low- and middle-income countries. But there is also growing evidence on the benefits of investment in quality early childhood education in terms of narrowing the gap in school readiness and improving long-term learning outcomes particularly for disadvantaged children (see for example, Van Huizen and Plantenga 2018 for a meta-analysis of the evidence). Although further research is required in low-income country contexts, a longitudinal study in the United States shows that benefits from investment in primary school are maximized when preceded by provision of quality preschool, and vice versa (Johnson and Jackson, 2019).

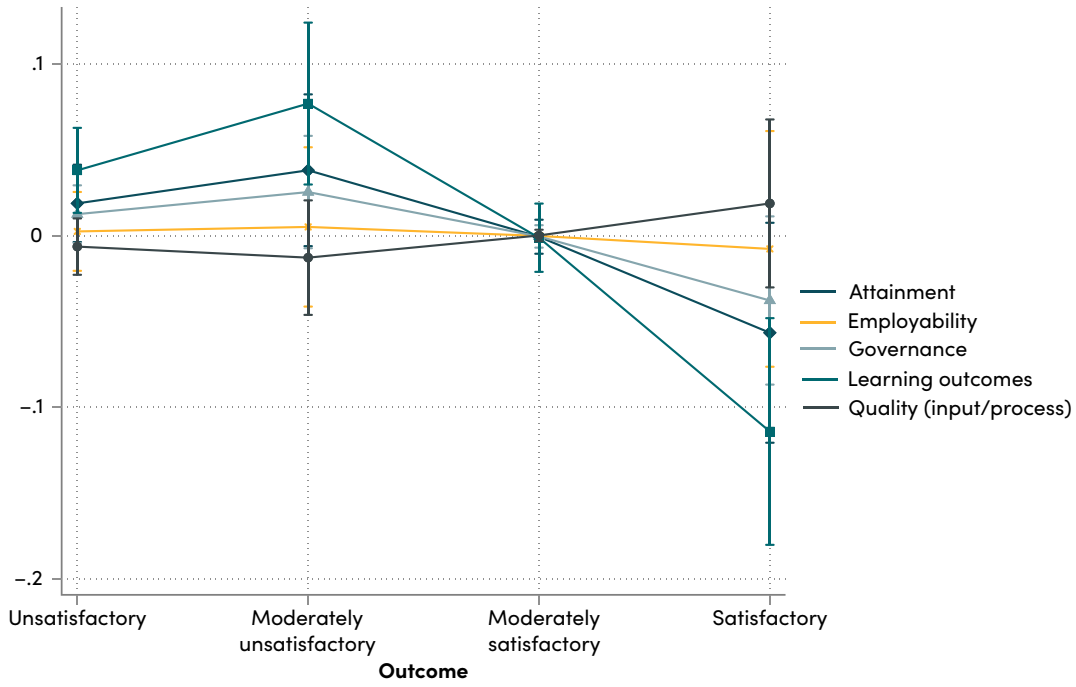
4. Better at expanding access for younger children than improving learning for older ones

The performance of World Bank financed education projects is ultimately determined by their effectiveness and efficiency in achieving their stated targets. Although there is recent effort to integrate independent and rigorous impact evaluation into the design and implementation of some education projects, one needs to rely on the ratings produced by the Independent Evaluation Group to compare the performance of a large number of projects over multiple decades and across the entire portfolio. Therefore, we use the IEG scores on all education projects completed and evaluated between 1998 and 2021 to examine the relative performance of projects focusing on various objectives and levels of education. The IEG outcome rating is expected to measure "the extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently".[7] For the majority of projects, the scores draw on the data supplied in the Implementation Completion Report produced by the program team at the Bank. This means IEG staff validate the self-assessment and independently determine the final score for a project based on the completeness, validity and consistency of data on project performance. The total number of education projects in our dataset that have been completed during that period and were eligible to receive IEG ratings is 414.

The first part of the analysis focuses on the performance of projects by type of objective. In other words, we seek to investigate how well projects on access, quality, governance, attainment, learning outcomes and employability have performed relative to each other, controlling for several other factors that may influence their ratings. Specifically, we control for the quality of project design and supervision (as rated by IEG), project value and project length. We also control for country fixed effects and year fixed effects to remove the effects of country-specific time-invariant omitted variables as well as unobserved time trends including periodic changes in performance rating methodology.

7 IEG (2015).

FIGURE 7. Projects targeting outcomes generally receive lower performance scores than projects targeting outputs[8]



We employ a four-scale measurement of project performance consisting of "unsatisfactory", "moderately unsatisfactory", "moderately satisfactory" and "satisfactory" ratings. We use access, which is the most dominant category of objectives, to represent a reference category against which to compare the performance of other objectives. Figure 7 shows that projects focusing on learning outcomes have the lowest probability of attaining a "satisfactory" rating compared to projects with an access objective.[9] Specifically, projects with a learning outcomes focus are 11 percent less likely than projects with an access focus to receive a "satisfactory" rating. Projects aiming to improve educational attainment are 6 percent less likely than access projects to attain a "satisfactory" rating. In contrast, there is no statistically significant difference between access and other types of objectives – governance, input quality, employability – in terms of the probability of achieving a specific outcome rating. This indicates an overall pattern where projects targeting outcomes tend to receive lower ratings than projects targeting outputs.[10]

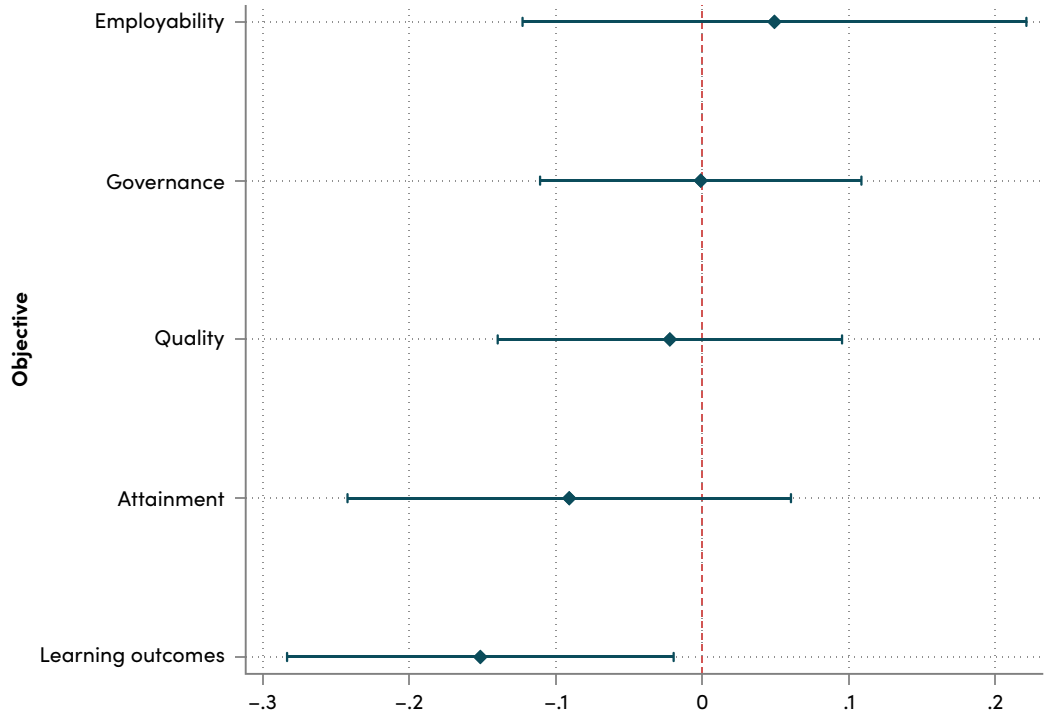
8 Full set of results are presented in Table A2 in the Appendix.

9 A large share of education projects are composed of multiple sub-objectives such as enrollment and learning outcomes. Therefore, strictly speaking, the correlation between a specific objective and project performance in the current analysis measures the marginal effect of the presence of that objective on the IEG score of the project.

10 The multiplicity of objectives could have an independent impact on project rating since projects with diverse objectives could be less focused. In order to test this, we controlled for the total number of thematic objectives of a project in one of the specifications. The correlation between number of objectives and outcome rating is not statistically significant, nor does it affect the significance of the other variables of interest.

It is conceivable that the subjective aspect in the assessment of outcomes could introduce some degree of bias. For instance, there have been criticisms regarding the clarity of distinguishing between "satisfactory" and "moderately satisfactory" outcomes. This ambiguity could have led to a significant concentration of projects receiving a "moderately satisfactory" rating (44 percent of our sample) as a "safe" rating for reasonably good projects. To examine the robustness of our findings and account for potential bias stemming from these ambiguities in the measurement scale, we adopt an alternative approach to measure project performance. We employ a binary indicator of project ratings, grouping all "satisfactory" and "moderately satisfactory" projects together as "successful projects," while categorizing "unsatisfactory" and "moderately unsatisfactory" projects as "unsuccessful projects."

FIGURE 8. Projects with an explicit focus on learning outcomes are most likely to be rated as unsuccessful[11]



Note: The bars represent the marginal effects of having a particular objective in a PDO on project outcomes within a 95 percent confidence interval.

Figure 8 shows that there is no statistically significant difference between the performances of projects focusing on access and most other types of projects, when using the binary classification of successful and unsuccessful projects. The only exceptions are projects with a focus on learning outcomes. The typical project with a learning outcomes objective is 15 percent more likely to fail than the typical project with an access objective. This means, once a sharper distinction of project success

11 Full set of results are presented in Table A3 in the Appendix.

is introduced to minimize potential arbitrariness in the 4-scale measurement of performance, learning outcomes projects appear to stand out as the only category that has met their targets less frequently than access projects.

In order to understand why projects with an explicit focus on learning outcomes score lower than projects focusing on access, we reviewed the Implementation Completion Report Reviews (ICRRs) for a sample of learning outcomes and access projects.[12] We randomly selected projects on either end of the rating distribution to examine potential factors that might have undermined the performance of learning outcomes projects relative to access projects. Our review focused on the narrative justifying the rating of the efficacy of a project in achieving its targets.

The ICRRs reveal that learning outcomes projects tend to receive negative ratings for two main reasons. First, they lack reliable baseline or endline data matching their initial targets. Second, it is not possible to attribute gains to project intervention because of data quality or measurement validity issues. It is important to note that it is only in a few cases that the lack of actual impact, as demonstrated by credible data, was cited as a reason for low rating. In contrast, learning outcomes projects tend to receive positive ratings when one or more of the following three conditions are fulfilled. One, the project involves the establishment and/or implementation of assessment and monitoring systems. Two, data quality is reliable even if causality is not immediately evident. Three, proper impact evaluation was conducted which has shown some level of positive impact.

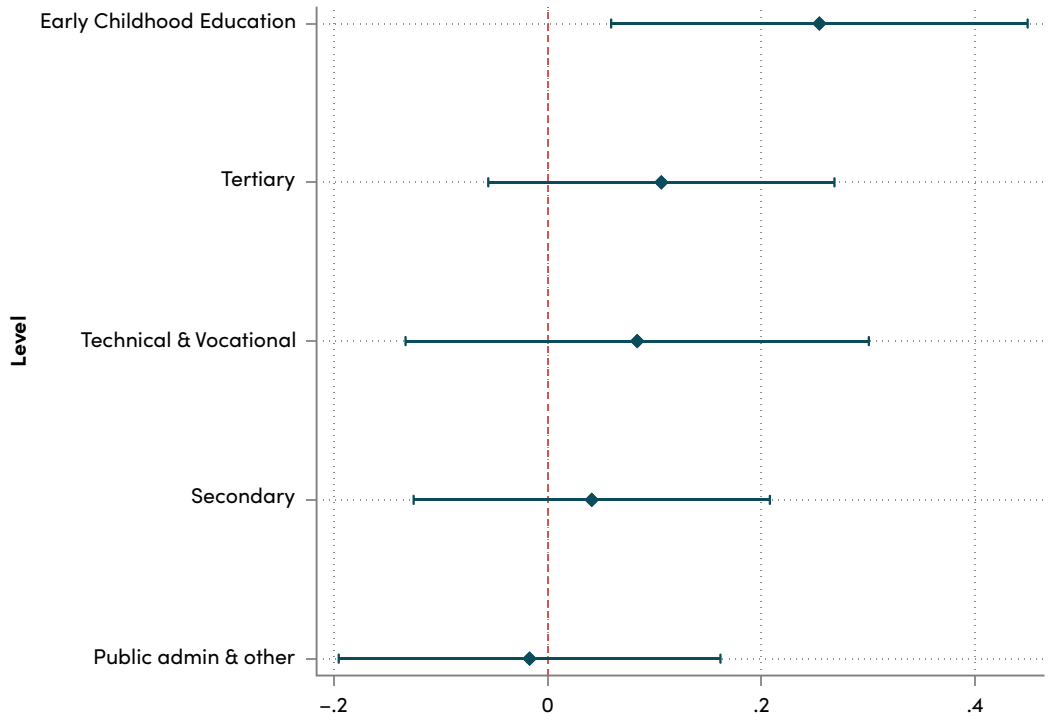
In comparison, access projects also receive negative ratings when data are not provided for the specific target group, making attribution difficult. However, such scenarios seem significantly less common than in the case of projects aiming to improve learning outcomes. Rather, one of the more common reasons causing access projects to be scored poorly is the existence of exogenous factors hampering progress. But, in most cases, the conditions for a positive rating of access projects seem more straightforward and easier to prove than those of learning outcomes projects.

These findings suggest that the lower ratings of learning outcomes projects may be attributed in part to the inherent difficulty in measuring success in improving learning outcomes, as compared to the relatively straightforward task of quantifying enrollment figures. While this certainly plays a role, it is not necessarily the sole explanation for the significantly lower scores received by learning outcomes projects compared to access projects. To explore this further, we examined the relationship between type of objective and project performance in the subset of projects for which the IEG assessed the quality of monitoring and evaluation. This can help us determine whether the challenges faced by learning outcomes projects go beyond mere results measurement.

12 ICRRs are prepared by the Independent Evaluation Group based on the self-evaluation of the program team presented in the Implementation Completion Report (ICR). The final score of a project on a series of metrics including efficacy and efficiency and overall outcome is determined by the ICRR based on the validation of the scores proposed by Bank staff in the ICR. The scores are accompanied by a brief narrative of the IEG's assessment of the performance of the project.

Therefore, we rerun the regression depicted in Figure 8, taking into account the M&E quality rating. The results reveal that even when considering M&E quality, there is a stronger and more precisely estimated correlation between projects with a learning outcomes objective and lower outcome ratings. Admittedly, there is only so much even the best M&E system could do to credibly demonstrate the impact of varied interventions on learning outcomes within the duration of a World Bank project. However, these findings are robust enough to highlight that, regardless of measurement challenges, World Bank projects encounter greater difficulties in achieving learning outcomes targets as compared to access-related objectives.

FIGURE 9. ECE projects are the only category with a significantly higher probability of success than primary education projects[13]



Note: The bars represent the marginal effects of falling in a particular subsector on project outcomes within a 95 percent confidence interval.

The second part of the analysis of project outcomes concerns the relative performance of projects focusing on different levels of education. As in the previous estimation, the discrete choice model includes controls for quality of project design and supervision, project value, project length as well as country and time fixed effects. The main explanatory variable indicates whether the primary subsector of a project is identified as one of the following: ECE, secondary education, TVET, tertiary education or public administration/other education. The model estimates the relative performance

13 Full set of results are presented in Table A4 in the Appendix.

of projects in each sub-sector against the reference category of primary education projects, which continues to comprise the largest portion of the education portfolio.

Figure 9 shows the results of a binary choice estimation, where the dependent variable classifies projects as either "successful" or "unsuccessful". There is little statistically significant distinction between the probability of success of projects in most sub-sectors compared to those in primary education. However, ECE projects stand out as the only category with a significantly higher likelihood of success than primary education projects. More specifically, ECE projects demonstrate a 25 percent higher probability of receiving a successful rating compared to primary education projects.

Similar to the results on learning outcomes above, we reviewed the ICRRs of a sample of ECE projects on either end of the rating distribution to examine the qualitative explanations for the relatively stronger performance of ECE. Our review shows that ECE projects are often dominated by enrolment and completion targets. So they tend to clear the bar for data and attribution more easily than projects aiming to improve learning outcomes. ECE projects are rated negatively when they clearly fail in expanding access or measurement of outcomes is incomplete.

5. A closer look at specific investments in early childhood education and learning outcomes projects

The findings in the previous section regarding the performance of various categories of education projects beg the question of what the Bank actually finances in areas where it seems to be succeeding and where it does not. Hence, we take a closer look at the specific activities financed through ECE projects as the relatively more successful subsector according to IEG ratings. Similarly, we examine specific activities typically funded through projects targeting learning outcomes (regardless of subsector) which is an area with relatively less satisfactory performance.

World Bank education projects often consist of a variety of activities that may not necessarily be directly related to the central objective of the project but are routinely included in most projects. Therefore, the absolute share of a specific activity in a given category of projects might not be a good indicator of the relative importance of that activity. Therefore, we compute the difference between the share of an activity in the category of interest – ECE or learning outcomes projects in this case – and its share in all other projects. We then express this difference in terms of the standard deviation of all activities in the same category to arrive at a measure of the relative significance of the activity in that category of projects. Specifically, we compute:

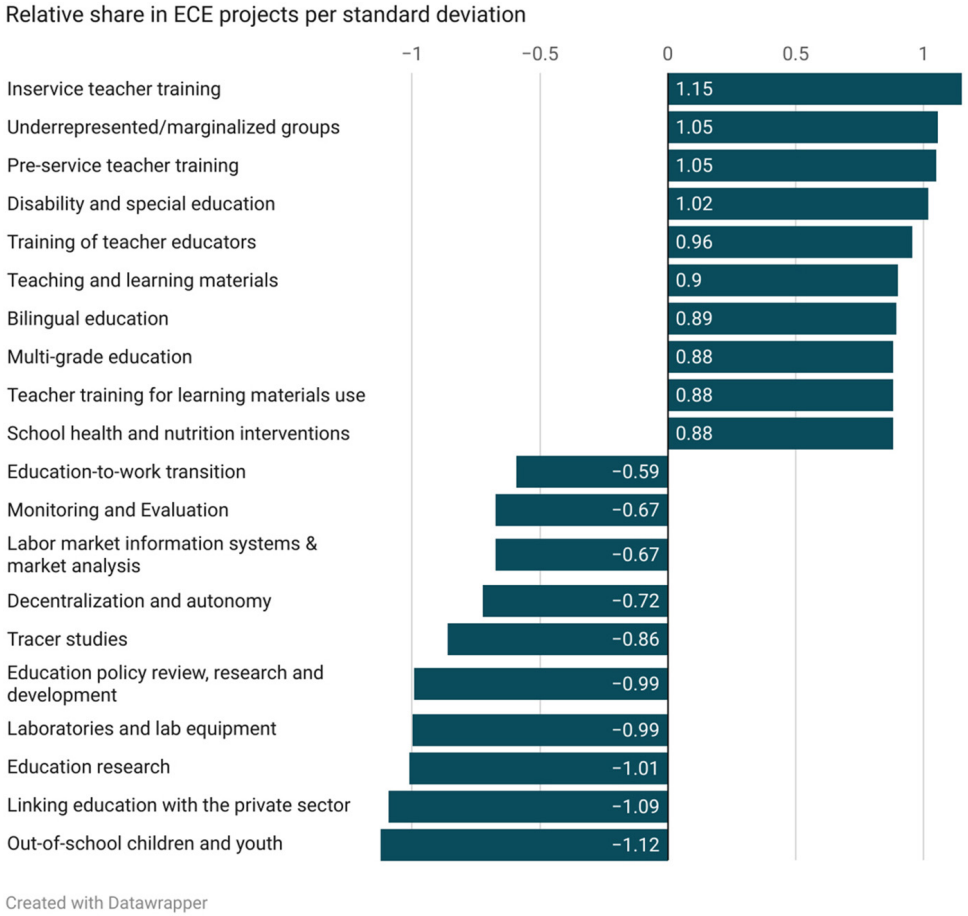
$$x_{ij} = \frac{y_{ij} - y_{ij'}}{\sigma_j}$$

where i is project activity belonging to the 139 categories specified in the the activities database, j is project category denoting a thematic objective or subsector, σ is the standard deviation of the share

of all activities in *j* and, *y* is the absolute share of an activity in a given category. *j'* denotes the set of project categories other than *j*. For instance when *j* represents ECE projects, *j'* consists of all non-ECE education projects, namely primary education, secondary education, TVET and tertiary education.

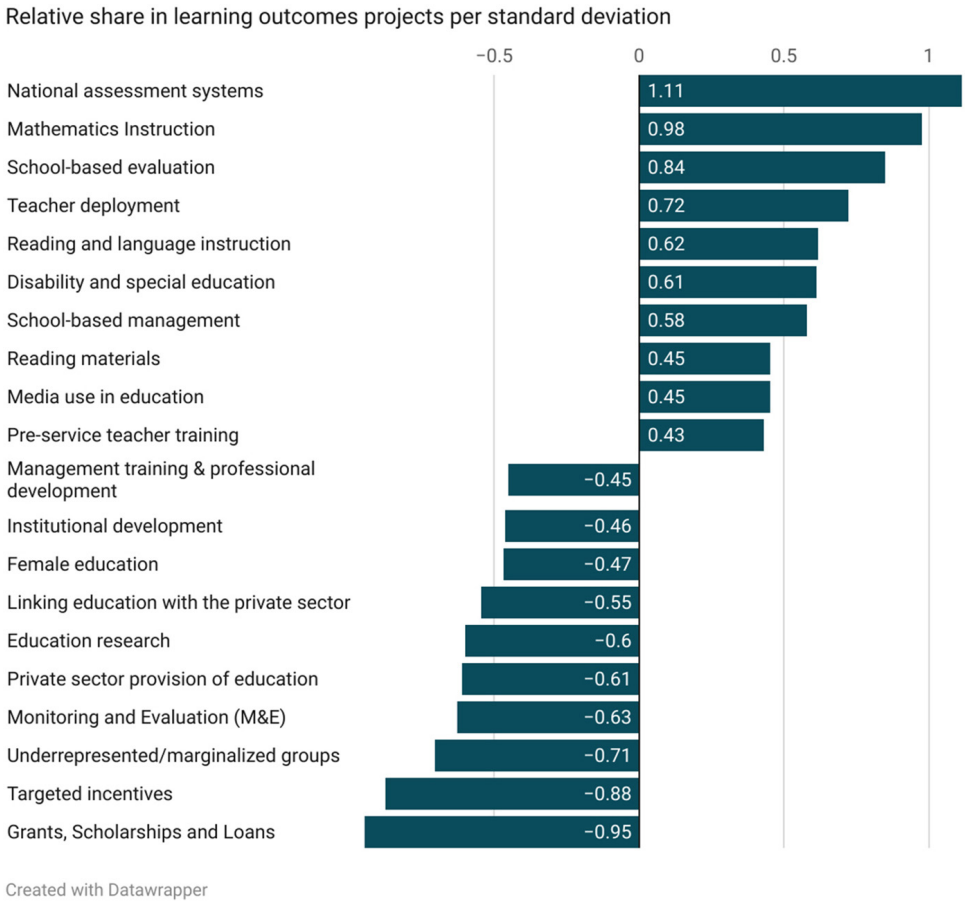
Figure 10 displays the top-10 and bottom-10 activities associated with ECE projects in terms of relative prevalence. Inservice teacher training is the most common activity among ECE projects. The difference between its shares in ECE and non-ECE projects is 1.15 times the standard deviation of the share of all activities in ECE projects. On the bottom end of the spectrum, activities related to out-of-school children and youth stand out as the least common among ECE projects. The share of such activities in ECE projects is lower than the corresponding share in non-ECE projects by 1.12 standard deviation. This is supposedly because the issue of out-of-school children is largely confined to primary and, to a certain extent, secondary education. The list of most common activities among ECE projects is dominated by activities related to teachers and inclusion. The two domains alone account for 8 of the top-10 activities. This suggests that expanding equitable access and improving the supply of teachers sits at the center of the World Bank's financing of ECE.

FIGURE 10. Teachers and inclusion dominate the list of most common activities financed through ECE projects



The list of top-10 activities in learning outcomes related projects, shown in Figure 11, is more diverse in terms of broader area of focus than that of ECE projects. However, the composition of the five most common activities demonstrate the emphasis of learning outcomes projects on assessment and curriculum reform. For instance, the share of national assessment systems in learning outcomes focused projects is higher than the share in other types of projects by 1.11 standard deviation. In contrast, the list of bottom-10 activities shows that there is much less emphasis on socioeconomic inclusion and system-wide capacity building in projects targeting learning outcomes. At the very bottom of the list, the share of activities linked to grants, scholarship and loans in learning outcomes related projects is lower than the corresponding share in other types of projects by 0.95 standard deviation.

FIGURE 11. Assessments and curriculum reform are prominent among activities financed through projects targeting learning outcomes



6. What is in a project may depend on who has prepared it

The World Bank has been playing an increasingly pronounced role in shaping the global education agenda through technical assistance and knowledge production beyond its traditional role of financing. As such, the project team on the Bank's side usually assumes a more substantial role

compared to the conventional responsibility of overseeing lending activities. The World Bank's directive for Investment Project Financing, for instance, stipulates that a task team be established during the early stages of project identification to develop project specifications in collaboration with various parties in borrower governments. While the general direction and primary objectives of a project may align with the policy priorities of the borrowing government, the specific design of the project often rests with World Bank personnel. This could give the Task Team Leader (TTL) significant influence over crucial decisions that ultimately shape the project's identity, structure, and eventual outcomes.

To test this hypothesis, we analyzed the association between the identity of the TTL at the approval stage of an education project and the choice of activities financed through the project. The dependent variable is the share of activities falling in each of the five largest categories of project activities, i.e. "equity and inclusion", "facilities", "curriculum and textbooks", "teachers", and "management information and data". Generally, the average project includes between 2 and 3 activities in each of those categories. However, there is significant variation in the total number of activities from each category which might be explained by the preferences of the TTL.

TABLE 2. Identity of the World Bank Task-Team Leader can explain the composition of education projects as well or better than the country the projects are located in

	Partial Sum of Squares, F-stat in Parenthesis									
	Share of Equity and Inclusion Activities		Share of Facilities Related Activities		Share of Curriculum and Textbook Activities		Share of Teachers Related Activities		Share of Management Information and Data Activities	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Country effects	.702* (1.29)	.625 (1.13)	1.33 (.98)	1.22 (.75)	.791*** (1.85)	.719** (1.59)	.744 (.63)	.739 (.51)	.774*** (2.49)	.771*** (2.87)
Year effects	.192* (1.55)	.113 (0.90)	.240 (.77)	.249 (.67)	.113 (1.17)	.074 (.72)	.277 (1.04)	.303 (.92)	.101 (1.43)	.110** (1.80)
TTL effects	1.09*** (1.61)	1.06** (1.55)	1.54 (.91)	1.54 (.76)	.734** (1.39)	.745** (1.33)	.912 (.63)	.869 (.49)	.750*** (1.95)	.760*** (2.28)
IDA loan		.003 (.67)		.039 (2.45)		.001 (0.32)		.001 (.06)		.007* (2.75)
TTL X IDA loan		.201 (096)		.349 (0.57)		.144 (.85)		.270 (.50)		.148* (1.47)
Residuals	.578	.374	1.44	1.09	.453	.304	1.24	.975	.329	.181
Total	2.99	2.99	4.93	4.93	2.20	2.20	3.24	3.24	1.94	1.94
Adjusted R-Squared	0.36	0.35	0.02	−0.16	0.31	0.27	−0.27	−0.57	0.43	0.51
Mean number of activities in category per project (with std dev in parenthesis)	2.6 (2.5)	2.6 (2.5)	2.29 (2.38)	2.29 (2.38)	2.16 (2.13)	2.16 (2.13)	2.16 (2.25)	2.16 (2.25)	2.07 (1.55)	2.07 (1.55)

Table 2 displays the outcomes of a basic ANOVA analysis, which breaks down the variance in the proportion of activities potentially attributed to TTL, country, and year fixed effects. Our analysis is built upon TTL data compiled from project appraisal documents for a total of 776 projects involving

419 individual TTLs. To differentiate between country and TTL effects, we focused on projects overseen by TTLs who have worked in at least two countries.[14] As a result, we were left with 489 projects and 143 TTLs for our analysis.

The findings indicate that the TTL's identity could account for a significant portion of the variations in the shares of project activities related to equity and inclusion, curriculum and textbook, and management information and data. In most of these cases, the variance in the types of project activities selected is explained as much or more by the identity of the TTL as by the identity of the country borrowing. Notably, we did not find any evidence suggesting that the influence of the TTL depends on whether the project is financed through an IDA or IBRD agreement.

7. Conclusion

Over time, the World Bank's stated objectives in education have evolved, as have the needs of its borrowers. On the Bank's side, it has publicly emphasized a pivot away from financing access to education toward improving education quality, especially at the primary level. Its borrowers, meanwhile, boast much higher primary enrollment rates than they did a quarter century ago, and may be looking toward new priorities beyond primary access.

This paper attempts to describe as well as offer tentative explanations for the main patterns and trends that have characterized the Bank's financing for education from 1998 through 2022. The data taken from project lending documents underscores the World Bank's pivotal role in enhancing equitable access to education in numerous low and middle-income countries. This role persists, even as the nature of access changes as countries move along the ladder of economic and educational development. However, the role of World Bank financing in improving learning outcomes in basic education remains unclear. This ambiguity seems to be linked to the inherent challenge of employing the traditional format and results framework of World Bank investment projects to address the often complex task of improving learning outcomes.

The demand-side of the financing relationship plays a role in determining the mix of objectives and subsectors funded through World Bank projects. As countries develop and primary enrollment rates increase, demand appears to shift toward financing not for improving test scores in primary school, but rather for expanding access to early-childhood education and, to a lesser degree, secondary school. It is likely that the underlying political economy incentives in many borrowing governments favor more spending in access projects which are shown to have a higher share of activities related to inclusion and facilities. So governments' reluctance to borrow for projects focusing on learning outcomes may explain some of the Bank's failure to match its lending portfolio to its rhetoric on quality.

14 Our approach to tease out the TTL effect borrows from Denizer et al. (2013).

However, we also find evidence that supply and demand are aligned on this point: borrowers' demand for continued lending on access matches the World Bank's own implementation capabilities. Specifically, in the case of ECE projects, these investments in access may also create a promising pathway to positively impact learning in the medium to long term. For this and other reasons, early childhood interventions could be a key part of a strategic approach to enhance learning throughout basic education in a manner that short-term projects attempting to tackle the "learning crisis" in a piecemeal fashion might not be able to achieve.

Finally, it is important to highlight that the World Bank's impact on education financing extends beyond its direct lending activities. By producing analytical products and providing advisory services, the Bank could influence the financing strategies of other multilateral agencies, bilateral donors, and the domestic resource allocation decisions of governments in low- and middle-income countries. Our goal here has been to see if the Bank puts its money where its mouth is. But it would be useful for future research to examine the broader implications of the Bank's work in advisory services and analytics for the evolution of overall education financing in developing countries.

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Appendix

Appendix 1: Methodological note

We compiled data on project characteristics including objectives and activities from various portals on the World Bank website. The main list of education projects and project characteristics approved during the 25 years between 1998 to 2022 was accessed through the main World Bank projects portal.

a. Screening of education projects

The list was filtered for active or closed projects, to exclude projects that were dropped. The list indicates the various sectors that are represented in a given project as sectors 1, 2 and 3. The sectors are listed in the order of their share of the project, signifying that sector 1 is the primary sector whereas sector 3 is usually less central to the overall objective of the project. Therefore, we have selected those projects with one of the following sectors listed as a primary sector:

1. Adult, Basic and Continuing Education
2. Early Childhood Education
3. Other Education
4. Primary Education
5. Public Administration – Education
6. Secondary Education
7. Tertiary Education
8. Workforce Development and Vocational Education
9. Sub-National Government (provided that sector 2 is one of the education subsectors listed above in 1–8)
10. Central Government/Central Agencies (provided that sector 2 is one of the education subsectors listed above in 1–8).

As a second stage screening, we went through the Project Development Objective of each project in the resulting list to determine whether it actually qualifies as an education project in terms of its primary focus. This leaves out some projects that have a significant education element, but are too multisectoral for them to be a tool for mainstream education policy. The two stages of screening left 815 projects approved between 1998 and 2022.

b. Coding project objectives and subsectors

The main value-add of our data lies in the systematic coding of project objectives and subsectors. The main input used to code the thematic focus of a project is the Project Development Outcome. Essentially, the coding exercise consists of parsing the text of the PDO of each project in the dataset. In this process, we employed WORDSTAT, a text analysis software, to build a keywords dictionary and iteratively refine it around a handful of commonsense categories that could define World Bank

education projects. Specifically, common topics were extracted with relevant keywords tagged to each topic, and the topics categorized into four broad categories, namely;

LEVEL_OF_EDUCATION_CATEGORIES
PROJECT_APPROACH_CATEGORIES
TARGET_GROUP_CATEGORIES
THEMATIC_CATEGORIES

For instance, the first iteration of the thematic categories encompasses the following topics;

ACCESS TO EDUCATION & RELATED SERVICES
CURRICULUM
EDUCATION INFRASTRUCTURE
EMPLOYABILITY & ENTREPRENEURSHIP
INSTITUTION, FINANCE & GOVERNANCE
LEARNING
QUALITY
RETENTION AND COMPLETION
RETURN TO SCHOOL
SCIENTIFIC RESEARCH
TEACHERS
WELLBEING

In subsequent iterations, the initial categories were reviewed by researchers and refined further to construct categories and keywords that are meaningful and relevant. Finally, we went through the suggested codes or categories for each project based on the keywords dictionary compiled by the software and verified the accuracy of the coding. Accordingly, we hand-coded those projects that were deemed to have been misclassified by the software. In what follows we provide an example of the typical PDO classified under each thematic category with the relevant keywords underlined:

- Access
  "The proposed Project's objective is to increase equitable access to pre-school education, and to establish conditions for improving its quality."
- Governance
  "Strengthen governance, rationalize financing, improve the quality of teaching and research, improve accountability for performance, and enhance transparency in financial management within the higher education sector."
- Quality
  "Improve the quality of secondary education, with a focus on underserved areas."

- Attainment
  "The key project development objective is to improve equitable access, retention and completion in quality primary education for out-of-school children in selected under-served areas."
- Learning outcomes
  "The project development objective is to improve learning outcomes for early grades, increase access to the science and mathematics tracks of secondary schools, and to improve equity in access to basic education."
- Employability
  "To develop mechanisms that improve and monitor the quality and labor-market relevance of higher education."

c. Compiling project activity data

The raw data compiled through the main World Bank projects portal does not contain data on project activities. Therefore, we compiled project activity data for education projects approved between 1998 and 2017 using the web-based query tool the World Bank Databank has made available. This involved project-by-project download for each of the 119 countries that received financing for education from the World Bank in the given time period. This resulted in 602 projects with 13 main activity codes and 139 sub-activity codes. The activity and sub-activity categories were already defined and assigned in the World Bank database. The main activity categories of education projects are;

1. Curriculum & Textbooks
2. Employment/TVET
3. Equity and Inclusion
4. Facilities
5. Financing
6. Learning Assessment and Examinations
7. Management Information Systems & Data
8. Policy and System Administration
9. School Management
10. Science, Technology, & Innovation (STI)
11. Teachers
12. Technology/ICT
13. Tertiary Education

The sub-activities represent a more accurate categorization of the actual investment on the ground. For instance, the sub-activities under "Curriculum & Textbooks" are:

1. Textbooks
2. Textbook rental/loan schemes and subsidies

3. Textbook distribution mechanisms
4. Teaching and learning materials
5. Teacher training for learning materials use
6. Student organizations and extra-curricular activities
7. Social Sciences and Humanities Instruction
8. Science Instruction
9. Reading materials
10. Reading and language instruction
11. Mathematics Instruction
12. Local design and production of textbooks and learning materials
13. Health and nutrition education
14. E-learning materials
15. Development of textbook publishing industry
16. Curriculum

We then cleaned, harmonized and merged the activities data with the rest of the project data we have constructed. The most complete version of the dataset with all project objectives matched to project activities covers 484 projects containing a total of 10,690 activities.

Appendix 2: Cross-lagged panel analysis

TABLE A1. Choice of project subsector as a function previous education project cycles in the same country

		Project Choice				
		ECE	Primary	Secondary	TVET	Tertiary
ECE	2nd lag	.109** (.046)	–.034 (.070)	.019 (.049)	–	.019 (.053)
	3rd lag	.144*** (.047)	.094 (.071)	–.013 (.056)	–.006 (.059)	–.027 (.058)
Primary	2nd lag	.072** (.035)	.172*** (.041)	.024 (.032)	.017 (.027)	–.066* (.037)
	3rd lag	.014 (.034)	.139*** (.040)	–.008 (.033)	.018 (.025)	–.061* (.034)
Secondary	2nd lag	.003 (.056)	.072 (.069)	.130*** (.042)	–	.030 (.048)
	3rd lag	.044 (.055)	–.028 (.078)	–.160** (.077)	–.044 (.062)	.045 (.048)
TVET	2nd lag	–.035 (.085)	.033 (.090)	–.012 (.067)	.081** (.036)	–.035 (.070)
	3rd lag	–.146 (.095)	.033 (.081)	–.043 (.067)	.066* (.082)	–.032 (.068)
Tertiary	2nd lag	.012 (.060)	–.014 (.074)	.047 (.050)	–.033 (.050)	.049 (.044)
	3rd lag	–.013 (.061)	–.032 (.075)	–.051 (.062)	.055 (.036)	.080* (.043)

Notes: The typical duration of an education project spans approximately 5.6 years. This is also roughly the length of the typical World Bank Country Engagement Framework (CEF) which outlines the strategic direction of the Bank's support for a given country. However, the average gap between two consecutive education projects implemented in one country is 2.6 years. Around a quarter of all projects in our dataset were approved in the same year as another education project for the same country. Therefore, for a project to be presumed a predecessor to a latter project, it generally would need to be two or three projects away from the succeeding project. Accordingly, we take the second and third lags of each project to analyze the persistence and switching patterns between sequential project cycles in the form of correlation with current project choice. We include year dummies in all regressions to control for changes associated with time trends.

Appendix 3: Full regression results (section 4)

TABLE A2. Project performance by project objectives (marginal effects based on ordered probit regressions using 4-scale outcome rating)

	Project Outcome Rating			
	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory
Objective type (Access is the reference category)				
– Governance	–.037 (.024)	–.0003 (.003)	.025 (.016)	.012 (.008)
– Quality (input/process)	.018 (.018)	.0002 (.001)	–.012 (.017)	–.006 (.008)
– Attainment	–.056* (.032)	–.0005 (.005)	.038* (.022)	.018 (.011)
– Learning outcomes	–.113*** (.033)	–.001 (.010)	.077*** (.024)	.038*** (.012)
– Employability	–.007 (.035)	–.000 (.000)	.005 (.023)	.002 (.011)
Design quality: satisfactory	.298*** (.029)	.002 (.026)	–.201*** (.030)	–.099*** (.020)
Supervision quality: satisfactory	.237*** (.030)	.002 (.021)	–.160*** (.025)	–.079*** (.016)
Project value (ln)	.030** (.015)	.0003 (.002)	–.020** (.010)	–.010** (.005)
Project length	.004 (.005)	.000 (.000)	–.002 (.003)	–.001 (.001)
Pseudo R-square	0.49			
N	405			

Notes: Regression includes country and year fixed-effects. ***, ** and * indicate significance at the 1%, 5% and 10% level, respectively. Standard errors are shown in parenthesis.

TABLE A3. Project performance by project objectives (marginal effects based on binary probit regressions using binary outcome rating)

	Successful Outcome (Satisfactory or Moderately Satisfactory)
Objective type (Access is the reference category)	
– Governance	–.001 (.055)
– Quality (input/process)	–.022 (.059)
– Attainment	–.090 (.077)
– Learning outcomes	–.151** (.067)
– Employability	.049 (.087)
Design quality: satisfactory	.253*** (.070)
Supervision quality: satisfactory	.382*** (.060)
Project value (ln)	.064* (.037)
Project length	–.014 (.013)
Pseudo R-square	0.51
N	229

Notes: Regression includes country and year fixed-effects. ***, ** and * indicate significance at the 1%, 5% and 10% level, respectively. Standard errors are shown in parenthesis.

TABLE A4. Project performance by subsector (marginal effects based on binary probit regressions using binary outcome rating)

	Successful Outcome (Satisfactory or Moderately Satisfactory) Rating
Subsector (primary education is the reference category)	
– ECE	.254*** (.099)
– Public administration and other	–.016 (.091)
– Secondary education	.041 (.085)
– TVET	.083 (.110)
– Tertiary education	.106 (.082)
Design quality: satisfactory	.246*** (.072)
Supervision quality: satisfactory	.395*** (.069)
Project value (ln)	.063 (.041)
Project length	–.016 (.014)
Pseudo R-square	0.50
N	229

Notes: Regression includes country and year fixed-effects. ***, ** and * indicate significance at the 1%, 5% and 10% level, respectively. Standard errors are shown in parenthesis.