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Information Provision Interventions to Foster Educational Attainment of Adolescents and Young Adults

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EDITORIAL

Welcome to the ninth edition of the Skills4Dev Knowledge Digest! This issue is dedicated to interventions addressing information frictions to decrease the educational achievement gap.

A significant educational achievement gap persists across various metrics, such as dropout rates, academic performance, and school completion rates, between adolescents and young adults in low-and middle-income countries and those in high-income countries. This is despite the strides made in expanding access to education over the past two decades, as highlighted in the <u>World Development Report 2018</u>. One contributing factor to this gap may be the lack of adequate information for individuals, particularly those from lower socio-economic backgrounds, to make informed decisions about their educational paths.

In response to this challenge, interventions aimed at providing information – such as private economic returns to education, detailed offerings of post-secondary programs, and available financial support – have gained popularity in recent years, in part due to their potential for low-cost implementation and ease of scaling up (McKenzie 2020). For instance, in the Dominican Republic, surveys revealed that students perceived the returns to secondary schooling to be very low. After students in randomly selected schools were given a brief statement about the actual higher returns at the end of the survey, they went on to attain an average of 0.20 to 0.33 more years of schooling over the following four years compared to students who did not receive this information (Jensen, 2010). However, the impact of such interventions can vary. In Colombia, for instance, a comprehensive intervention that provided senior high school students with a 35-minute

presentation on college earning potential, financial aid opportunities, and the significance of test scores for college admissions and scholarships did not lead to noticeable improvements in academic performance or college enrollment decisions (<u>Bonilla Mejia et al., 2019</u>).

To improve the effectiveness of these interventions, it is important to thoroughly understand the specific challenges and the context in which the intervention will take place. This process involves assessing prevalent misconceptions about the value of school completion or college accessibility, which may contribute to the educational achievement gap identified, to determine what information should be provided. In addition, it is important to identify the target audience—whether students, parents, teachers, or school principals — to ensure the credibility of the information source, to select the most effective communication channel—be it in-person presentations, videos, or SMS—, and to decide on the optimal amount of information to convey without overwhelming the audience, among other considerations. Haaland et al. (2023) discuss the technical considerations at the moment of designing information provision experiments (for a summary, see McKenzie 2020). A final word of caution: while well-designed information interventions can address information asymmetries and contribute to decreasing the educational achievement gap of adolescents and young adults, these efforts have to go hand in hand with substantial investments to improve the quality of educational inputs in low- and middle-income countries to address additional barriers students might face.

We would like to hear from you! Please send us your ideas, suggestions, questions, or collaboration opportunities at skillsgsg@worldbankgroup.org. Learn more about what the GSG can do for you at the end of this digest.

Happy Reading!

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FEATURED WORKS ON INFORMATION INTERVENTIONS



Some things to think about when conducting information experiments

David McKenzie. World Bank | Blog | 2020 | Global

This blog highlights key lessons from a working paper by Ingar Haaland, Christopher Roth, and Johannes Wohlfart that reviews methodological issues in designing information experiments. It covers aspects such as measuring beliefs, key design choices, and effect sizes.



Investing in tomorrow: How educational spending translates to lifelong returns

Harry Patrinos. World Bank | Blog | 2023 | Global

This blog discusses the benefits of education, both social and economic benefits. Each year of education for a person yields approximately a 10% rise in earnings, outpacing annual returns from the stock market. Education broadens the spectrum of choices available to individuals, acting as a conduit for the transmission of social values across generations.



How to Improve Education Outcomes Most Efficiently?

Angrist, Noam et al. | Working Paper | 2020 | Global

This paper proposes using learning-adjusted vears schooling (LAYS)—which combines access and quality and compares gains to an absolute, cross-country standard—as a new metric for reporting gains from education interventions. Authors find that information provision is one of the most cost-effective types of intervention to improve LAYS (see pg. 3)

ESSENTIAL READING



The (Perceived) Returns
to Education and the
Demand for Schooling

Robert Jensen | Journal Article | 2010 | Dominican Republic

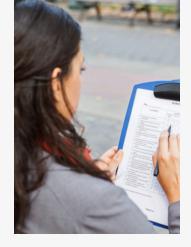
This study shows that it is the perceived returns that affect schooling decisions, and these perceptions may be inaccurate. Using survey data for eighthgrade boys in the Dominican Republic, it finds that the perceived returns to secondary school are extremely low, despite high measured returns.



Information policies and higher education choices experimental evidence from Colombia

Bonilla-Mejía, L. et al. | Journal Article | 2019 | Colombia

This paper studies the effects of large-scale information policy that nudges high school students towards college information websites in Colombia. Findings indicate students learn about that financial aid but do not update their inflated beliefs about college earnings, are not motivated to improve academic performance, nor substantially modify their enrollment choices.



Designing Information Provision Experiments

Haaland, I. et al. | Journal Article | 2023 | Global

This article surveys the emerging literature using information provision experiments in economics and applications discusses in finance. macroeconomics. political economy, public economics, labor economics, and health economics. It also discusses how to measure beliefs; design the information **intervention**; measure belief updating; and with deal potential confounds.

WHAT'S BREWING AT THE WBG?



Tripping at the Finish Line:

Experimental Evidence on the Role of Misperceptions on Secondary School

Completion

Carolina Lopez. World Bank | Working Paper | 2024 | Argentina

This paper studies why senior students do not fulfill the requirements to graduate. While there is evidence on the provision of information about returns to education, less is known about whether students are aware of the effort required to obtain a diploma. This study generates evidence on the above phenomenon and assesses the relative importance of both channels.



Incentivizing School
Attendance in the Presence
of Parent-Child
Information Frictions

Damien de Walque and Christine Valente | Journal Article | 2023 | Mozambique

This paper estimates the effect of incentivization and information school on attendance. Through a unified experimental setting, it finds that information alone improves parental monitoring and has a large effect relative to CCTs. Incentivizing children is least effective as incentivizing parents importantly, not because able parents were appropriate transfers to children.



Information, Knowledge, and Behavior: Evaluating
Alternative Methods of
Delivering School
Information to Parents

Cerdan-Infantes, P. et al. | Journal Article | 2022 | Indonesia

This paper evaluates alternative approaches to disseminating information about a schoolbased management program in Indonesia. Holding a facilitated with school meeting stakeholders sending or targeted text messages (SMSs) to parents increased knowledge participation. The and provision of written materials to parents through their children did not show any impact on knowledge or participation.

ADDITIONAL PUBLICATIONS

> Readings on providing information about the returns to education/financial aid

The heterogeneous effect of information on student performance: Evidence from a randomized control trial in Mexico

Ciro Avitabile and Rafael de Hoyos | Journal Article | 2018 | Mexico

Using data from the randomized control trial of the pilot, this paper studies whether providing 10th grade students with **information about the average earnings** associated with different educational attainments, life expectancy, and obtaining funding for higher education **can contribute to improving student outcomes**.

Information, Role Models and Perceived Returns to Education: Experimental Evidence from Madagascar

Trang Nguyen | Paper | 2008 | Madagascar

This paper shows that increasing perceived returns to education strengthens incentives for schooling when agents underestimate the actual returns. The key implication of this paper results is that households lack information but can process new information and change their decisions in a sophisticated manner.

<u>Can information and counseling help students from poor rural areas go to high school?</u> <u>Evidence from China</u>

Loyalka, P. et al. | Journal Article | 2013 | China

Conducting a cluster-randomized controlled trial (RCT), this study finds that information does not have significant effects on high school student outcomes. Unlike information, counseling does have an effect. Findings suggest that **counseling increases dropouts and seems to lower academic achievement**.

Intended college attendance: Evidence from an experiment on college returns and costs

Zachary Bleemer and Basit Zafar | Journal Article | 2018 | United States

In **an information experiment** conducted on a representative survey of US household heads, baseline perceptions of college costs and benefits were found to be substantially biased, with **larger biases among lower-income and non-college households**. After exposing respondents to objective information about average college "returns" or costs, it was found a significant impact of the "returns" experiment, persisting in a follow-up survey two months later.

The effects of an information campaign beyond university enrolment: A large-scale field experiment on the choices of high school students

Ballarino, G. et al. | Journal Article | 2022 | Italy

This paper reports evidence from a randomized field experiment in which treated high school students were provided with **information concerning the expected costs and benefits of HE**, conditional on their possible career choices and on their chances of success across different FoS. Results show that **treated females from high-educated families chose more economically rewarding fields of study**, while **treated males from low-educated families were more likely to enter the labour market**.

<u>Investing in Schooling In Chile: The Role of Information about Financial Aid for Higher</u> Education

Taryn Dinkelman and Claudia Martínez A. | Journal Article | 2014 | Chile

This paper investigates the impacts of providing low-income Chilean adolescents with information about **how to finance higher education** and ask whether providing parents with the same information magnifies the effects on schooling outcomes. Results demonstrate that access to **relevant information about financial aid affects important schooling choices** long before tertiary education begins.

> Readings on providing information to parents/schools to improve attendance/performance or parental involvement/monitoring

The impact of combining performance-management tools and training with diagnostic feedback in public schools: Experimental evidence from Argentina

de Hoyos, R. et al. | Journal Article | 2024 | Argentina

Providing principals with low-stakes information on their students' test scores has been shown to improve school management, instruction, and achievement in upper-middle income countries. This study evaluates this approach by itself and combined with tools and training in public primary schools in Salta, Argentina. Results suggest that tools and training can effectively complement information in contexts of low principal capacity.

Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets

Andrabi, T. | Journal Article | 2017 | Pakistan

This paper contributes to the literature by studying the experimental impact of **providing information in the presence of both a public sector and a (competitive) private market** for schooling in a low-income country. Information provision facilitates better comparisons across providers and improves market efficiency and child welfare through higher test scores, higher enrollment, and lower fees.

<u>Parents' Beliefs about Their Children's Academic Ability: Implications for Educational Investments</u>

Dizon-Ross, R. | Journal Article | 2019 | Malawi

A field experiment in Malawi shows that, at baseline, parents' beliefs about their children's academic performance are often inaccurate. Providing parents with clear, digestible performance information causes them to update their beliefs and adjust their investments. Heterogeneity analysis suggests information frictions are worse among the poor.

<u>Providing performance information in education: An experimental evaluation in Colombia</u>

Barrera-Osorio, F. et al. | Journal Article | 2020 | Colombia

This study shows the effects of providing information to families on their children's reading and math achievement in a mid-size city in Colombia. Although most families are poorly

informed about their children's performance, this information intervention closes the gap between beliefs and performance and induces some behavioral response among parents in the treatment group. Results include positive impacts on student achievement of 0.09 SD to 0.10 SD in the first two semesters after treatment, followed by fadeout in year two.

The impact of an accountability intervention with diagnostic feedback: Evidence from Mexico

de Hoyos, R. et al. | Journal Article | 2017 | Mexico

The Mexican state of Colima implemented a low-stakes accountability intervention with diagnostic feedback among schools with the lowest test scores in the national assessment. A difference-in-difference and a regression discontinuity design are used to identify the effects of the intervention on learning outcomes. The results indicate that full and wide dissemination of information detailing school quality is critically important.

Parent-Child Information Frictions and Human Capital Investment: Evidence from a Field Experiment

Peter Bergman | Journal Article | 2021 | United States

This paper studies information frictions between parents and children in Los Angeles, California and their effect on human capital investments. Parents have upwardly biased beliefs about their child's effort and the information treatment reduces this bias while increasing parental monitoring. Policy simulations from the model demonstrate that improving school reporting or providing more information to parents can increase learning at low cost.

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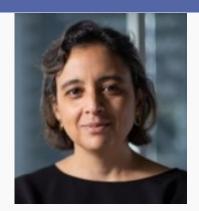


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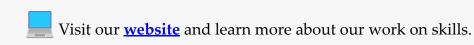
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This knowledge digest is a product of the Skills Global Solutions Group, co-led by Education Global Practice and Social Protection & Jobs Global Practice. This edition has been coordinated by Judith Perez (Skills GSG Community Manager).

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