Influencing Higher Education Choices through a Customized Digital Application Platform in the Dominican Republic

Researchers:

Christopher Neilson

Sector(s): Education

Location: Dominican Republic

Sample: 5,500 high school seniors

Target group: Students Youth

Outcome of interest: Enrollment and attendance Empowerment

Intervention type: Digital and mobile Information

Partner organization(s): Gabinete de Coordinación de Políticas Sociales (GCPS), Progresando con Solidaridad (ProSoli)

Lack of information about the economic gains from the programs of study and the complexity of the higher education landscape can make it difficult for students to pursue programs of higher education. Researchers are partnering with the Government of the Dominican Republic to introduce a custom tablet application to prospective students on what tertiary education programs, scholarships, and funding options exist based on their interests and finances, as well as employment rates and earnings potential by university and major. Researchers will evaluate program impacts on educational choices, hours worked, and earnings. Results are forthcoming.

Policy issue

Students throughout low- and middle-income countries are seeking out opportunities to pursue higher education in greater quantities than ever before. According to UNESCO, the gross percent of students in low- and middle-income countries enrolled in higher education between 2000 and 2018 increased from 13.2 percent to 33 percent.[1] The returns to higher education, as measured by labor market earnings, are often very large; however, the average earnings of graduates varies greatly by discipline and university attended. Furthermore, high school students may not know about the differences in labor market earnings by discipline.

Past research shows that providing students with information may affect their immediate educational actions as well as their longer-term educational plans. However, there are important policy design questions about how to personalize this information and how it could be implemented within existing social programs. Can a tablet-based application empower social workers to provide youth with tailored information and help young people make improved decisions about higher education?

Context of the evaluation

According to the Central Bank of the Dominican Republic, there is a 78.1 percent income gap between workers who have higher education and those who do not. Individuals who have a bachelor or associate degree are more likely to be employed (79.2 percent) compared to those who dropped out at secondary school (60 percent). Additionally, earnings vary greatly by course of study and university attended. For example, the average worker who attended the *Pontificia Universidad Católica Madre y Maestra*,

one of the most renowned universities in the country, earns three times more than the average student who studied at *Universidad Católica del Este*. Much of this information is publicly available on a government website. However, it is likely that many families, especially low-income families, will not visit the information websites independently.

Progresando Con Solidaridad (PROSOLI) is an existing national social protection program that combines conditional cash transfers, capacity building, socio-family support, and links State-offered social services to the poorest families in the Dominican Republic. In the current program, social workers periodically visit the homes of PROSOLI beneficiaries. The preexisting relationships provide a natural platform to share information with families.



Teen boy writes in notebook while looking at tablet.

Photo: Shutterstock.com

Details of the intervention

The Dominican Republic Government is partnering with researchers to evaluate the impact of personalized information and search recommendations on the educational decisions of PROSOLI students. PROSOLI social workers will use a tablet-based application to help provide personalized information to these students at the end of secondary school.

The sample will consist of 5,500 high school seniors randomly selected from the beneficiaries of PROSOLI. Three months before the end of the school year, half of the students will be visited by PROSOLI social workers armed with a smart tablet.

The tablet will contain an interactive artificial intelligence software application tool. The tool will have three modules as follows:

1. *A skills module* that will solicit the skills of the students and share what skills are needed to succeed in their disciplines of interest.

2. *A program finder* that will allow students to navigate through the programs and universities offered in the Dominican Republic based on their interests. They will also be able to compare programs and universities by employment rates and labor market earnings of past graduates.
3. *A scholarships and funding module* that will disclose the funding opportunities for tertiary education in the Dominican Republic. Students will be able to email the information they acquire to themselves and their parents.

Researchers will measure five different groups of outcomes including stated educational plans, earnings beliefs, and feasibility of plans. They will also measure immediate actions like hours of study by discipline and hours worked. Short-run outcomes will include matriculation and earnings. In longer-term follow-ups, researchers will measure medium-run outcomes including educational choice and hours worked/studied. Finally, they will measure outcomes including earnings in the formal sector and one's probability of being in the PROSOLI program.

Results and policy lessons

Research ongoing; results forthcoming.

---

1. World Bank. "School enrollment, tertiary (% gross) - Low & middle income." The World Bank Group. Accessed September 24, 2020. https://data.worldbank.org/indicator/SE.TER.ENRR?locations=XO