



Students need guidance in languages they speak

Mentorship programmes in languages besides English could unlock opportunities for young scientists in Latin America, says Clarissa Rios Rojas.

Have you ever wondered what might happen if we unleashed all the professional talent going untapped in Latin America? There is a way to find out: boost mentorship programmes.

The 2017 World Bank report *Higher Education in Latin America and the Caribbean* finds that of people aged 25–29 who have ever been enrolled in higher education in the region, only half have finished their degrees. It attributes dropout rates in part to a “lack of mentoring, tutoring, and counseling programs” (see go.nature.com/2fy8dmr). Although there are many excellent mentorship programmes in high-income countries, most are offered only to students already in those nations, and usually only in English.

I come from a middle-income family in Peru. As an undergraduate student, it seemed unthinkable for me and my classmates to attend international conferences, go on internships abroad, gain access to top scientific journals or even meet scientists conducting research using state-of-the-art technology. (In 2006, DNA microarray analysis was mainstream; as far as I know, no one in Peru was using it.) I didn't know how to go about any of these tasks, and money was scarce. In my biology class at a public, national university, maybe 8 out of 60 students were able to afford English classes. Some struggled even to pay the university fee, which, when I was there, amounted to 80 Peruvian soles (US\$24) a semester.

I was more fortunate than most in Peru's public-university system. I had parental support, and the rare chance to learn English at secondary school and while at university. Knowing English gave me access to most scientific literature, and opened up many opportunities. During the last semester of my bachelor's degree, I received one of three scholarships given by the University of Turku in Finland for university students in Peru for exchange studies (the programme is no longer running). Of the 30 or so scholarships I have received to study or travel to events, conferences and workshops, only two applications could be completed in Spanish.

During the final year of my PhD in Australia, I realized how lucky I was. I wanted to help Latin American students who are hampered by a lack of money and contacts. So, in 2015, I founded Ekpa'palek, a non-profit whose name means ‘teaching a child to take their first steps’ in Shiwilu, an Indigenous Amazonian language. It offers free online mentorship in Spanish and Quechua — the primary Indigenous language of Peru — and we are in the process of adding other languages.

Interested students can go to our webpage (www.ekpapalek.com) to find a suitable mentor: someone who works in their field, speaks their language, works in a country of interest or offers a particular set of skills. Currently, we host profiles of about 40 mentors (nearly all originally from Latin America), with expertise in the physical, biological and social sciences, life coaching and English writing. Mentors and mentees connect, sometimes once, sometimes for ongoing guidance.

Today, Ekpa'palek's blog is read in 116 countries, and the videos on our YouTube channel have been viewed more than 68,000 times in total. Some of our mentees are now studying or doing internships at top universities in the United States, Canada, Mexico and Brazil, among others.

The 174 students and young professionals who have so far participated have asked for help on tasks such as improving their CV, finding opportunities abroad, choosing a speciality, becoming internationally competitive and — inevitably — how to improve their English. We have had students who are eager to learn about careers not taught in some Latin American countries (Peru and Guatemala, for example, do not seem to offer any masters degrees in astrophysics). Some have sought advice on which countries are most welcoming to gay people, or how to deal with rape trauma. (Latin America is particularly prone to violence against women and people from sexual and gender minorities.) Mentoring programmes should be designed to help students not only with professional development, but also with their self-confidence, emotional intelligence and personal issues.

We also know there are more students in the developing world than we can reach. There are programmes, including AuthorAID and Cientificos.pe, that help young people who are already engaged in a career as scientists in Latin America. There are fewer that help students to learn which opportunities are available, and give guidance on how to access them. I have been unable to find any university or government department in Latin America with a solid mentorship programme.

Many universities globally host excellent mentorship programmes; Latin American universities should, too. Governments could alter curricula at national universities to include more soft skills. Organizations such as the United Nations Educational, Scientific and Cultural Organization could emphasize mentoring programmes for professional development in the developing world.

Virtual mentorship programmes such as Ekpa'palek can help to attenuate the brain drain that many Latin American countries face, by bringing back knowledge and connections, if not people. So can Serendipity, another organization created by scientists, which offers virtual mentorship for science, technology, engineering and mathematics students in Peru.

But these are not enough, especially when both rely entirely on crowdfunding and voluntary work. More programmes — both virtual and institutional — are needed to unlock the vast talent and potential of Latin American students. ■

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