



Apprentices' trajectories in Mexico: from motivations to outcomes

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This research is part of an international comparative study about the implementation and enactment of the German model of dual apprenticeships (DA) in India and Mexico. Drawing on interviews with the beneficiaries of the programme, this summary characterizes the motivations and trajectories of Mexican apprentices and DA graduates and examines some of the mediating factors that explain the different impact of dual apprenticeships on their educational and labour market outcomes.

KEY FINDINGS:

- The aspiration to pursue higher education studies is widespread among graduates from the Mexican Model of Dual Apprenticeships (MMFD), and cuts across gender and sector lines.
- While some apprentices join MMFD as an intermediate step in their pursuit of further studies, others do so to signal their value within the labour market.
- Male apprentices use MMFD almost exclusively as an employability strategy, which is common among those in a manufacturing career.
- MMFD graduates in a position of socioeconomic vulnerability see their education and labour aspirations severely limited due to the selectivity of higher education and are disadvantaged when considering job options.
- The disruption caused by COVID-19 led many apprentices to lose their social and institutional links within the professional world, thus reducing the potential of MMFD as an employability strategy.
- COVID-19 disincentivized many MMFD graduates from continuing their studies – particularly as many of them did not value online learning.
- Dual apprenticeships only operate as a gateway to higher education for a limited subset of relatively well-off students who can access public universities or can afford private universities.

Background of the study

This Research Summary synthesizes the emerging findings from the Work Package (WP3), relative to the Policy Implementation and Impact of Dual Apprenticeships (DAs). This strand of the research is aimed at analysing the way dual apprenticeship programmes are enacted within concrete training and learning practices, and at elucidating the mechanisms that explain the impact of dual apprenticeships on inequalities of access, learning and labour market outcomes among young people in different local contexts.

The investigation of such questions was informed by analytical contributions of two theoretical approaches: the realist evaluation approach (Pawson & Tilley, 1997) and human capabilities theory (Sen, 1999; Nussbaum, 2000). Methodologically, this strand of research relied on a combination of quantitative and qualitative methods, including an apprentice survey and interviews with implementers and apprentices.

This Research Summary focuses on the findings afforded by the interviews with the beneficiaries of the Mexican Model of Dual Apprenticeships (MMFD), which were conducted following a longitudinal design. The research team interviewed 52 apprentices in the regions of Coahuila and Estado de México; once during their participation in the programme, and a second time some months after the programme concluded. Table 1 summarises the distribution of the sample in terms of region, field of studies and gender of the interviewees.

Table 1: Distribution of interviewees

	Manufacturing		Services		Total
	Female	Male	Female	Male	
Coahuila	9	12	2	3	26
Estado de México	3	7	10	6	26
Total	12	19	12	9	52

Research results

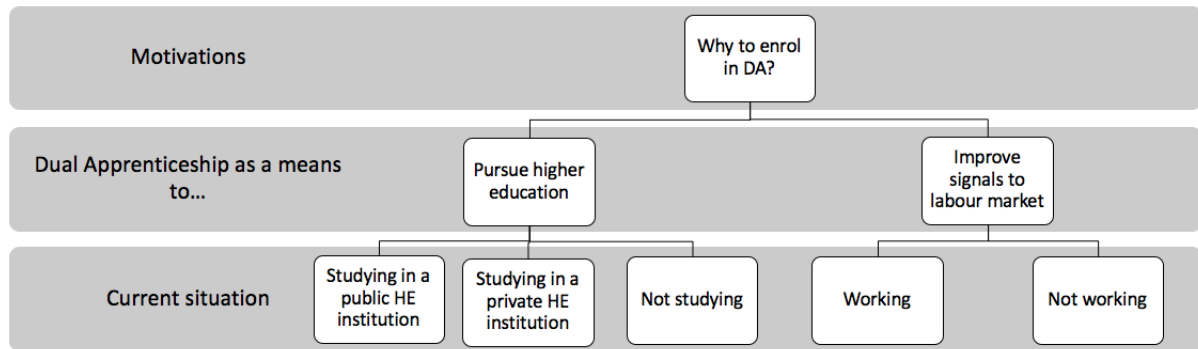
Apprentices' trajectories through MMFD

The interviews allowed us to identify two main motivations underpinning the apprentices' decision to join the MMFD programme (that is, rationales regarding its ultimate uses). It is thus possible to draw a distinction between those joining the programme mainly as a means to **signal their value within the labour market**, and those who joined the programme as an intermediate step in their **pursuit for further education** (Figure 1).

Certainly, these motivations are not mutually exclusive and can rarely be empirically observed in a *pure* form – most interviewees explained their decision as a *combination* of different motivations. The distinction thus serves an analytic purpose but does not bear a direct correspondence to empirical reality.

Also, the expectations as to the uses of the MMFD programme cannot predict the trajectories undergone by these apprentices. As shown by Figure 1 below, each of these motivations can lead to different educational and labour pathways.

Figure 1: Characterization of motivations and associated pathways



Notes: (1) 'Current situation' is used here to capture the status of the interviewees in the context of the second interview; (2) Labour-related and study-related current situations are not mutually exclusive.

Dual Apprenticeships as a means to pursue higher education

When reflecting on their own expectations and motivations to join the MMFD, a large proportion of the interviewees revealed that they perceived the programme as an **education strategy** – that is, an intermediate step before joining a higher education institution. In fact, as shown in Table 2, the continuation of studies (either in combination with employment or as a standalone occupation) is the preference most frequently mentioned by the interviewees, and cuts across gender lines and fields of study.

Table 2. Distribution of interviewees according to motivation

	Female			Male			Total
	Manufacturing	Services	Total female	Manufacturing	Services	Total male	
Combine further education and work	5	6	11	6	1	7	18
Further education	6	6	12	11	6	17	29
Work	1	-	1	2	2	4	5
Total	12	12	24	19	9	28	52

Remarkably, this trend holds true across fields of study and gender. The cross-cutting character of such preference is ultimately revelatory of the widespread perception of university education as a symbol of social status and as an essential element for social mobility. The line of reasoning informing this preference is aptly captured in the words of a machines and tools apprentice:

"I am thinking about continuing my studies, get into courses, that aspect is important to comply with the requirement that you need the theoretical information [...] What happens when you have your certificate from a university? A certificate shows that you are someone who knows more and if you have more experience within the factory, obviously they are just going to like you better. That would be my plan for the future, have more knowledge and then a certificate from a university to get a stable job" (E-IB-MH-M2_JR)

Apprentices exhibiting this motivation typically aimed to gain access to a higher education (HE) institution, in a graduate programme generally connected to their area of studies¹. These interviewees saw the MMFD programme as a means of achieving the qualifications necessary to enter a HE programme, but also as a way of getting a well-rounded educational experience (under the assumption that the practical component of the MMFD might complement a university education perceived as more theoretical). The practical learning that the MMFD programme offers was seen as an advantage compared to their peers, as they were gaining more specialized training in their field of studies. In addition, those willing to combine further education with work (as a way of sustaining themselves or their families, or of funding the cost of HE), perceived MMFD as an opportunity to access more qualified and, consequently, better paid jobs.

Three pathways can be identified for the apprentices willing to continue in the education system once they finished their apprenticeship. Thus, at the second interview, some of the MMFD graduates had gained **access to a public university** after passing the regular admission test or by 'direct access' (see section *The impact of COVID-19* below). A second group of former apprentices **had joined a low-cost private university**. As will be discussed, this was generally perceived as a 'second best' – for whereas private institutions are much less selective in academic terms, they have considerably higher fees than public universities (imposing an economic burden), and a much poorer reputation that devaluated their credentials (imposing a cultural burden). Finally, some of the interviewees in this group were **not enrolled in any educational institution** when the second interview occurred – either because they failed their admission exam or because they were waiting for the return of face-to-face education.

Dual Apprenticeships as a means to improve signals to the labour market

A more limited proportion of the interviewees revealed that they perceived dual apprenticeships primarily as an **employability strategy** – that is, a strategy to improve their chances in the labour market by signalling their *value as employees* in the eyes of prospective recruiters. As shown in Table 2, this motivation is held almost exclusively by male apprentices and is more common among those in the manufacturing field.

The interviewees assumed that their participation in the MMFD programme would either expedite their transition to the labour market or secure them better job roles (more qualified, better remunerated, better working conditions, etc). Such expectations rely on the assumption that prospective employers will prioritize candidates with a MMFD background, due to their superior technical skills and experience², over candidates with regular TVET training. An example of this reasoning can be found in the words of an electromechanics apprentice who stated the following:

“I had some friends from around my house and they also told me that it was very good because, for example, once I go to the factory, they could offer me a job” (C-SL-EL-M1_JR).

Two different pathways can be identified for those youngsters seeking a swift transition to the labour market. Some of them succeeded in their intent and were able to gain employment after their graduation from the MMFD programme. In the context of the second interview, they were **employed in an extremely wide spectrum of activities** that ranged from large firms to family businesses. Remarkably, the companies they had joined did not necessarily correspond to their field of study, with great variation in the level of formalization. Conversely, other apprentices had not transitioned to the labour market and **remained unemployed** by the second interview.

¹ However, some interviewees mentioned their willingness to switch fields and enter a HE programme unrelated to their DA field of study.

² The time spent in the company and the reputation of the company (with a premium on international companies) became thus key variables for these group of youngsters.

Mediating factors

As noted in the section above, the educational and labour trajectories of MMFD graduates are notoriously heterogeneous, and the original motivation to join weakly predict outcomes. In this section, we identify two main mediating factors that might help explain this diversity of educational and labour pathways.

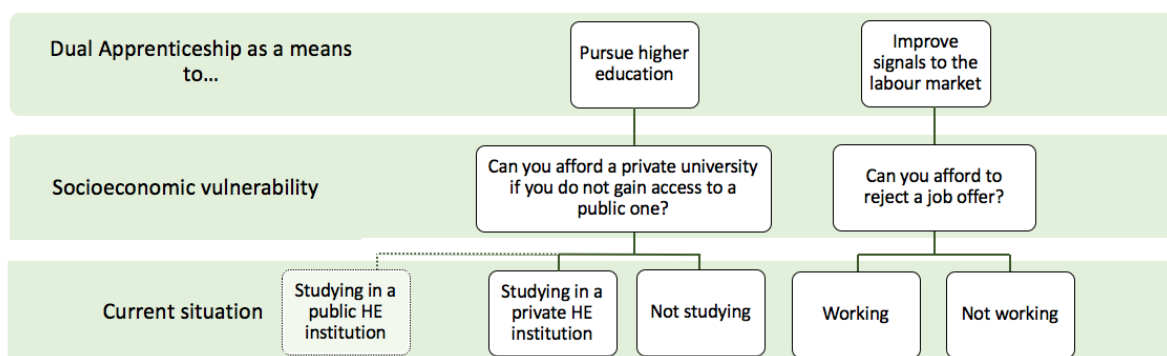
The impact of socioeconomic vulnerability

A first group of mediating factors relate to the degree of material welfare and the social position enjoyed by the apprentices and their families. Most of the interviewees belonged to low and low-middle SES households and therefore their buying power was far from homogeneous. While some of them had a steady source of income, other families were in a situation of greater socioeconomic vulnerability (e.g., single-parent families). This relative degree of vulnerability impacted directly on both the study and labour prospects of the interviewees.

In relation to the former, socioeconomic vulnerability conditioned their **capacity to remain unemployed, and to adopt a discriminating approach when considering job offers**. On the one hand, apprentices from more vulnerable households had sometimes been working during their MMFD training or had ‘rushed’ into the labour market right after their graduation with little regard for the correspondence between the post and their field of studies. On the other hand, those students with a comparatively better socioeconomic situation could afford to adopt a more selective approach in their transition to the labour market. They were more willing to reject job offers if they did not judge them as a worthy opportunity, or to adopt a less active attitude in their search for a job, remaining unemployed for some time. This was the case of an unemployed apprentice that reasoned,

“I didn’t apply although I had the opportunity to get these jobs, but they were not focused in the area I know about, which is accounting, they were other employments such as call centres and so on” (C-TR-MH-M1).

Figure 2: Socioeconomic conditions as mediating factor



Socioeconomic conditions also shaped the interviewees’ plans as to the continuation of their studies. Those apprentices willing to transition to university saw their plans conditioned by their **ability to pay for higher education**. As noted above, private universities are more costly than public ones. As a consequence, interviewees from vulnerable families had more restricted educational options – in practice, they could only afford to pursue their studies if they entered a public institution or secured the economic support of a third party (e.g., their employer). Conversely, the apprentices from better-off households could rely on private institutions as a fall-back strategy or if they did not feel confident to pass a public entry exam and were thus less likely to drop their educational aspirations.

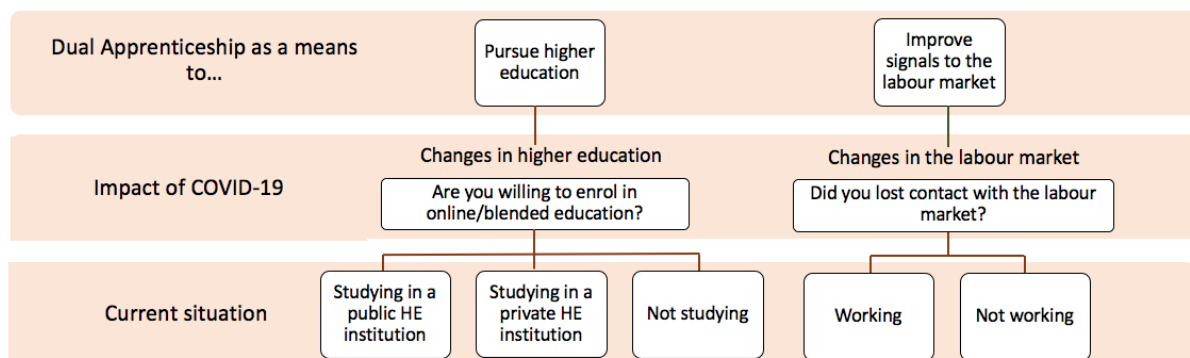
It is important to bear in mind that the effect of socioeconomic conditions intersects with the degree of **selectivity and accessibility to public universities**. In the context of Mexico, access to public HE institutions is generally conditioned to selective entry examinations, and the degree of selectivity of these admission tests vary across states³. Thus, the pathways of those willing to enter university depended partially on the structure of their state’s HE system. Those in less selective systems had greater chances to **pursue their studies in a public institution**. Conversely, those required to sit highly selective entry examinations were less likely to continue their studies in a public university and therefore their chances of educational continuity **were mediated by their capacity to join private institutions**.

Overall, a highly selective HE architecture appears to *magnify* the impact of socioeconomic vulnerability. Youngsters in critical socioeconomic situations in highly discriminating HE systems were more likely to abandon their aspiration to pursue further studies – as they were less likely to afford the cost of these institutions and less willing to spend their salary on their studies (as opposed to contributing to support the family). Conversely, apprentices from better-off households could compensate for the effects of selective HE by applying to private universities.

The impact of COVID-19

The coronavirus outbreak constitutes another factor that shaped the trajectories of the interviewees. As shown in Figure 3, the impact of the COVID-19 pandemic can be considered twofold as it contributed to transform both the work and educational opportunities of the interviewed youngsters.

Figure 3: COVID-19 as mediating factor



In relation to the former, we found that many of the interviewees approaching the MMFD as an employability strategy were forced to adjust their initial expectations – either delaying their transition into the (formal) labour market, or by accepting posts outside of their field of studies. This is the result of two different factors. First in the context of the first interview, many of the interviewees motivated by the MMFD' employment prospects, were convinced that after completing the apprenticeship the company would offer them a position. However, such promises rarely materialized. This is widely attributed to the disruption caused by COVID-19, which forced the **companies to shut down temporarily**, or discouraged them from recruiting additional staff. This was the case of an apprentice who was initially confident she would receive a job offer from the hotel where she was undertaking her training, but who in the context of the second interview was disappointed to have not been recruited. She reasoned this was an expectable outcome since,

“The importance of the activities I used to do has really decreased [...] there is not much activity, we are in the middle of a pandemics, there is not a lot of guest movement” (E-NP-HT-F1).

³ For the purposes of this summary, it is for instance worth noting that admission processes are more selective in the metropolitan area of Mexico City than in Coahuila.

A second factor emerging from the pandemic is that the extended lockdowns led to a general slowdown of economic activity, thus reducing employment opportunities. Such deceleration translated into **fewer employment opportunities for MMFD graduates** and led several interviewees to enter non-qualified posts or to remain unemployed in the hopes of better opportunities arising.

Overall, the impact of the COVID-19 pandemic in terms of employment opportunities appears to be vehiculated by the **apprentices' loss of contact with the labour market** – that is, their disconnection from the social and institutional networks through which job offers and awareness of work opportunities circulate.

For those approaching the MMFD as an intermediate step in the pursuit of further studies, the COVID-19 outbreak appears to have operated as a *double-edged sword*, simultaneously making it difficult to graduate from the MMFD programme and to progress into HE. On the one hand, the COVID-19 outbreak led to a delay in the certification of apprentices, preventing them from applying to HE institutions. On the other hand, the transition towards **blended (or distance) learning disincentivized some apprentices from continuing their studies**. This was particularly the case of those exhibiting a more expressive motivation, which had a clear preference for face-to-face teaching. Conversely, interviewees more interested in the instrumental value of education (and particularly by the employment opportunities afforded by certain titles) were less likely to be discouraged by remote learning. The temporary suspension of admission tests greatly improved the chances of MMFD students with more limited opportunities to gain a higher mark in the university entry examinations.

Way forward

The results revealed above are indicative of a disconnection between the goals pursued by the MMFD programme and the goals of its beneficiaries. The MMFD programme has been portrayed in Mexico as an employability strategy – yet youngsters join it to pursue further studies. Since dual apprenticeships programmes in Mexico are not equipping students with the competences rewarded in university entry examinations, MMFD apprentices end up seeing their agency diminished – in the sense that the programme does not equip them to pursue the life they value.

In addition, the results show that the programme barely mitigates the effect of social inequalities of deprived groups. Particularly in the context of highly discriminating HE systems and disrupted labour markets, the MMFD programme appears to have a very limited impact when it comes to improving the opportunities of the most disadvantaged social groups. Conversely, the programme seems more effective in supporting the aspirations of more advantaged students, who can afford slower transitions into the labour market and resort to private HE if public options are not accessible to them.