Education and Performance in Aviation: Realising and Sustaining Benefits

Presented by Arab Air Carriers Organization - AACO
AACO’s Views on Education and Performance in Aviation

Introduction:
While the aviation sector is unique in its dynamics as compared to other service sectors, the issue of educating and training human resources in a way that would cater for the expected technology disruptions/automation is a challenge faced by most sectors around the world. The World Economic Forum has recognized that the ongoing gap in skills as technology further reshapes business needs should be addressed, and highlighted three key areas that should be part of a systemic change in education and training in order to address this issue as follows:

1. Connecting education and employment
Employers need to collaborate with schools and universities on the development of curricula and a shared practical knowledge of the market. The education system also needs to change to allow a focus on lifelong learning.

2. Improving forecasts
Better forecasting of industry and labor-market trends is vital to allow governments, businesses and individuals to react quickly to change. Big data is likely to prove pivotal in developing more accurate predictions of where the jobs market is moving and where the skills shortages are expected to lie.

3. Disrupting education and labour policy
Education and labour policy need to be re-examined to make them more reactive and relevant to the ever-changing market realities.

AACO’s Opinion:
Reflecting on the three key areas above as highlighted by the World Economic Forum, we believe that the aviation sector, including all its relevant stakeholders (public and private), can work according to the following roadmap in order to address the challenges that Artificial Intelligence (AI) and Automation bring to the future of aviation jobs, and also to make use of the new promises that these two developments bring as new occupations emerge.
1- Working with governments (early education years)
Aviation Stakeholders can start advocacy at a national level with the public sector/ governments to focus on enhancing and changing the school systems to improve basic skills that would be much needed for employees to be able to adapt to the changing business needs resulting from technology disruptions. Emphasis can be on creativity, critical and systems thinking, and adaptive and life-long learning.

2- Working with higher education institutions (higher education years)
When it comes to higher education, aviation stakeholders can establish partnerships with education institutions to train students (through internships) seeking future jobs in the aviation sector. This way, starting with the basic skills acquired at schools that would help students adapt their skills and knowledge with technology disruptions, followed by some knowledge from the sector during higher education years would put future employees on the right track in their aviation careers.

Partnerships and continuous dialogue between aviation stakeholders and higher education institutions is also very important in adapting the curricula to include studying material that is relevant to aviation jobs.

3- Working with aviation technology providers (when on the job)
Partnerships also need to be established with technology providers in the aviation sector to provide the needed training for employees to adapt to incoming technologies.

Aviation technology providers should be asked by the technology users to provide forecasts of incoming technologies and share those with the technology users (airlines, airports, etc...) so that the latter prepare for a smooth transition of workers’ skills and can as well do their own internal forecasts. On the other hand, aviation technology providers should also establish links with education institutions and share technology forecasts in the aviation sector so that the latter would adapt their curricula to provide the required skills for students to cater for future business needs.

4- Working with Policy Makers:
Airlines and other aviation stakeholders might choose to establish their own aviation academies or continue enhancing their partnerships with training institutions, but before getting creative on more ways to spend money on human resources, advocacy with governments is essential to create incentives for stakeholders to invest in human capital and job creation. These incentives could be as follows:
a. Tax benefits: on one side to reduce taxation in general on the aviation sector so that it plays its role as a driver to the economy, and on the other side to advocate for receiving tax benefits on everything related to educating and training employees. For example, tax and customs exemptions for imported simulators to train pilots.

b. Removing restrictions on investments (national and cross-border): opening the market for the private sector to invest in aviation entities (airlines, airports, etc...) would help aviation entities receive the proper financing to invest in educating and training their employees.

c. Removing regulatory burdens: Removing regulatory burdens, opening up markets for the free flow of people and goods, easing visa restrictions to stimulate demand on travel are few of the elements that could help airlines and other aviation entities be profitable enough to re-invest money in enhancing human resources.

5- Embracing Technology:
While it might sound contradictory, but embracing technology is also one of the key areas that the aviation entities need to do. New occupations would emerge as a result of new technologies. New technologies used for training purposes would also help in educating and training personnel. Tools for e-learning is one example.