

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Enabling the Future - Developing the Space Workforce (5)

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RESPONDING TO EMERGING NEEDS IN SPACE AND NON-SPACE TRADES: EDUCATION
BEYOND TRADITIONAL METHODS TO TRAIN FUTURE WORKFORCE AND THEIR
EMPLOYERS.

Abstract

It has been recognized that drawing, maturing and keeping students in the aerospace fields meets multiple challenges. In 2008 the International Astronautical Federation (IAF) created the Global Workforce Development Subcommittee in order to help young generation of professionals to maintain their space affiliations. Since then the aerospace field has changed significantly with commercial sector growing and gaining more recognition and trust from the space agencies and other traditional space sector players. Their successes and achievements created a space “renaissance” and boosted interest post-graduate space education.

This paper presents a series of analyses including current employment trends in space and non-space related fields, aerospace disciplines traditionally taught at universities, new trends and needs in the space sector. The paper discusses changing dynamics and shifting objectives not only in space industry but other, non-traditional space businesses that just begin recognizing benefits that space can offer. The discussion provokes an idea that a means to educate a broader population need to be developed and examined. Some existing examples of multidimensional space-themed practices are presented and analyzed.

In summary, the paper presents a compilation of requirements to satisfy future diverse market needs. Rapid technological and scientific developments require fast application processes and broader spectrum of expertise not only from the workforce but also from their bosses. The discussed in the paper educational and outreach approach may fulfil these requirements and gradually engage a new way of space education.