Title of Project:
Developing and Validating Diagnostic Speaking and Listening Tests for Ab Initio Cadet Pilots

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TIRF Research Topic Investigated:
Language Assessment

Project Summary:
Over the next 20 years, 635,000 commercial pilots will be needed to meet worldwide demand for international travel. Forty-eight percent of this growth will occur in the Asia-Pacific region, with the majority of the growth driven by the Chinese market. All pilots need to speak English to ‘Operational Level 4’ because English is mandated by the International Civil Aviation Organisation (ICAO) as the default language of international aviation. The scale of the personnel requirements facing the aviation industry over the next two decades represents a colossal training and assessment challenge. These assessment challenges are further compounded by a decentralized and largely unregulated aviation English testing industry, allowing for wide interpretations concerning test design, scoring, and standard setting. In reality, there is no way of determining whether ICAO Level 4 (operational) represents a stable standard across different aviation tests within different member state certification programs. This study focuses on the assessment needs of ab initio (beginner) pilots and seeks to address a number of the real-world challenges facing the industry by developing and validating diagnostic speaking and listening tests designed to measure the ability of non-native English-speaking cadet pilots to engage in practical flight programs conducted in English. The target population will be primarily located in two major aviation universities within China. Test development will follow a socio-cognitive validation framework and employ a multi-strand, mixed-methods design with phases involving concurrent collection of data.