

RESEARCH DIRECTIONS

Clever thinking for student success

Associate Professor David Cole, of the Centre for Educational Research, recently led a team that examined whether students who learn to think critically in years 11 and 12 become high achievers at university. With funding from the International Baccalaureate Organization, Associate Professor Cole investigated the experiences of more than 1300 IB students to determine what value they and their teachers placed on the diploma program's Theory of Knowledge course.

"The Theory of Knowledge (TOK) course involves what knowledge is and why knowledge is important," says Associate Professor Cole. "It requires students to sit back and think, and to think between subjects, rather than just absorb lots of content, follow the formulas and get the answers. However, there was a shortfall of data addressing what kids get out of it – and what teachers get out of it. We wanted to know if there is any difference [at school and beyond] between the kids who do TOK and the kids who don't."

Sixty-three Australian schools offer the IB diploma program; in NSW, IB programs are offered only in the independent sector. Theory of Knowledge is one of three areas of study – the others are an extended essay, requiring independent research, and the three-pronged CAS (creativity, action, service).

Associate Professor Cole's research used quantitative and qualitative data gathered from a range of participants in the IB diploma program – about 1300 students and 80 teachers. An initial online survey was followed by in-depth case studies across four schools – one boys' school, one girls' school and two co-ed schools. The research team explored engagement and participation in the TOK course, as well as its application in other IB subjects.



Australian education is considered by some to be a world leader in developing independent, critical thinkers. At the same time, the country's education system, which allows different curricula to be operated in the nation's six states and two territories, has been unable to implement a sustained policy on the teaching of critical thinking in upper high school. At a time when there is growing scrutiny of the means by which secondary students are assessed and deemed eligible for university entrance, this study aimed to determine the role played by the Theory of Knowledge course in that process, and in a student's success or otherwise in the tertiary arena.

Project Title: IB Diploma Programme: Theory of Knowledge (TOK): Exploring learning outcomes, benefits, and perceptions

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Funding has been set at: \$48,479

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May, 2014