

Research priorities

In order to maximise the benefits of both cash and in-kind research investment, and to ensure that research meets our current knowledge requirements, the department selectively targets its resources towards projects that match our strategic priorities. These priorities, articulated in the *DETA Strategic Plan 2008–2011*⁶, are:

- laying strong educational foundations
- enhancing individual and economic opportunities
- enriching lives and communities
- engaging with others
- improving agility and sustainability.

Matching the departmental research priorities with our strategic objectives is intended to stimulate research activity that supports the achievement of these objectives, addresses gaps in our evidence base, and positions the department to respond to emerging challenges and issues. This enables the department to invest both its cash and in-kind support to yield relevant and useful outcomes for our staff and clients.

The following research priorities and topics of interest have been developed through consultation across the department. These are intended to encourage research on specific topics, and to facilitate research collaboration and partnerships. The research topics are deliberately broad to enable flexibility of research projects within the topic areas. More specific research questions are also listed to guide research more directly to address defined knowledge requirements of the department. This is not an exhaustive list of the department's research interests, particularly as our knowledge and information needs evolve over time, but rather represents an indication of where we plan to prioritise our research activity and investment.

Priorities	Topics and research questions
<p>Laying strong educational foundations</p> <p><i>Every child and young person will be well prepared for life success through learning and education</i></p>	<p>Teaching and learning</p> <ul style="list-style-type: none"> • In what ways can pedagogy, information and communication technology (ICT) and learning spaces foster growth and change in teaching practices to support student learning? • What whole school approaches are effective in managing student behaviour and mental health? • What is the relationship between school leadership, school culture and student performance? • How do school leaders best support whole school innovations in teaching and learning, professional practice and change management?

⁶ Ibid.

Priorities	Topics and research questions
<p>Laying strong educational foundations</p> <p><i>Every child and young person will be well prepared for life success through learning and education (cont'd)</i></p>	<p>Curriculum</p> <ul style="list-style-type: none"> • Priority curriculum areas: <ul style="list-style-type: none"> – creativity – universal social and emotional learning programs – literacy and numeracy – citizenship and civics – financial literacy. • What influences do different areas of teacher knowledge (curriculum knowledge, general and specific pedagogical knowledge, knowledge of learners) have on the effectiveness of teacher practice and student achievement in particular curriculum areas? • What factors determine the effectiveness of moderation practices in securing consistency of teacher judgment across sites? • How does the form of documentary curriculum specification (e.g. the syllabus) influence teaching practice and student achievement?
	<p>Early childhood education</p> <ul style="list-style-type: none"> • How can child development be supported in the early years to ease the transition to school, and to achieve optimal educational outcomes? • What are some effective strategies to improve developmental and educational outcomes in the early years of schooling for children from disadvantaged backgrounds (e.g. low socioeconomic groups, children at risk of abuse)? • What are the effects of the preparatory year on the transition to school, and student achievement in lower primary grades and beyond? • In what ways has the introduction of the preparatory year in Queensland affected the learning outcomes of Indigenous students, students from disadvantaged backgrounds and students with disabilities?
	<p>Access, participation and equity</p> <ul style="list-style-type: none"> • How can access to and participation in education, training and higher education be optimised for at risk groups and individuals (including retention and transitions to higher education)? • What are some strategies to address disparities in educational achievement between different socioeconomic groups? • What are successful strategies for improving the learning outcomes of students from disadvantaged communities? • What are some programs or factors that encourage higher student attendance and retention? • What are some resource allocation models which may improve efficiencies in the provision of student services in schools, TAFE institutes and higher education institutions? • How are school, TAFE and higher education workforces best supported to ensure high quality educational outcomes for students in areas of particular socioeconomic need and disadvantage?

Priorities	Topics and research questions
<p>Laying strong educational foundations</p> <p><i>Every child and young person will be well prepared for life success through learning and education (cont'd)</i></p>	<p>Improving outcomes for Indigenous students</p> <ul style="list-style-type: none"> • What constitutes exemplar practice in Indigenous education practices and what is needed to sustain successful outcomes over time? • What are the impacts of urbanisation on educational experiences, opportunities and outcomes for Aboriginal and Torres Strait Islander students? • What is the impact of Indigenous workers in schools and other education and training facilities on Indigenous student achievement levels? • What are some strategies for improving teachers' identification of Indigenous student needs and awareness of and access to specific tools and strategies for supporting them? • What are the most effective approaches to foster engagement of Indigenous parents with teachers?
	<p>Technologies and futures</p> <ul style="list-style-type: none"> • What are some effective models for the integration of ICT into educational best practice, including teacher development, pedagogy and partnerships across government, the education and training sectors, and industry and the community? • How can collaborative networking spaces be used and shared for teaching and learning purposes by students and staff? • What are the advantages and challenges, barriers and incentives for integrating environmental education for sustainability as a whole-of-school approach? • What are effective models for the integration of ICTs into educational best practice?
	<p>Science, Technology, Engineering and Mathematics (STEM)</p> <ul style="list-style-type: none"> • What are the reasons for the low enrolment and high attrition rates for STEM courses at school, university and TAFE? • What strategies could be implemented to boost uptake and completion of STEM courses (in general, and for particular target groups, e.g. women)? • What is the effectiveness of bridging programs for STEM undergraduate degrees?

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<p>Enhancing individual and economic opportunities</p> <p><i>Queenslanders will be linked to opportunities that support economic prosperity and enhance lifelong wellbeing</i></p>	<p>VET participation and completion</p> <ul style="list-style-type: none"> • How can vocational education and training (VET) support greater participation in the workforce, especially for groups whose participation is relatively low? • What course structures and teaching and learning methods are attractive to potential VET students? • What are the causes of current levels of non-completion, and is there a need for strategies to promote better completion rates? • Do variations in fee structure/free courses affect the distribution of enrolments or the completion rates in the publicly funded VET sector? • What difference can the use of mobile technologies make to the training outcomes for industry? • What are employers' perceptions of VET graduates with Certificate IV qualifications and above? • What are effective delivery and assessment models to ensure competency outcomes to a workplace standard for students undertaking institutional-based VET qualifications? • What effective mechanisms can be developed to improve qualification completion in VET? <hr/> <p>VET, higher education and labour force demands</p> <ul style="list-style-type: none"> • What is the nature and distribution of unmet demand in the publicly funded VET sector? • What are best practices to foster business investment in human capital? • What is the role of VET in improving productivity growth? • What is the role for VET (including export potential) in skilling people for potential new and revised 'green' jobs such as waste disposal technology and installation of renewable energy? • How can sustainability principles be included in the delivery of training and operation of institutes to promote environmentally sustainable practices? • What is the role for training in skilling labour force re-entrants? • How can up-skilling alleviate possible capacity constraints in a tight labour market?

Priorities	Topics and research questions
<p>Enriching lives and communities</p> <p><i>Queenslanders will benefit from a rich cultural life and thriving creative communities</i></p>	<p>Developing and planning for a culture of creativity</p> <ul style="list-style-type: none"> • What are the components and conditions of a vibrant arts and cultural community? • How do we plan effectively to serve and support a vibrant arts and cultural industry, with particular emphasis on Queensland’s diversity and our social, cultural, demographic and geographic challenges? • What arts and cultural programming and physical infrastructure will be required to implement plans for a vibrant arts and cultural industry? • How can the sector better cater for the demand for interactive arts and cultural experiences, particularly among children and young people? • What are some ways to engage and diversify services for new audiences for the arts? • What are the changing trends/patterns of cultural consumption in Queensland? • What has been the impact of virtual vs. live delivery of arts and cultural product? • What assistance is needed to facilitate new modes of delivery? • What are the changes in audience demographics in Queensland across the different sectors that have arisen as a result of new technologies, such as the web and gaming technologies? • Who are the competitors for the arts consumer’s discretionary dollar? • What are the spending levels and consumption habits of Queensland’s arts consumers? <hr/> <p>Arts and education</p> <ul style="list-style-type: none"> • How is creativity best positioned, promoted and measured in the education system and the community at large? • What are some effective methods for the arts, school, VET, and higher education sectors to develop better relationships to improve creativity and arts within educational and training programs?
<p>Engaging with others</p> <p><i>Productive relationships will be fostered to maximise outcomes for Queensland</i></p>	<p>Community engagement</p> <ul style="list-style-type: none"> • How can the department effectively plan, implement and evaluate purposeful community engagement initiatives? • What are effective models for working with the community to support learning? <p>This priority area will also be addressed through our research activities in collaboration with our partners and our research dissemination processes.</p>

Priorities	Topics and research questions
<p>Improving agility and sustainability</p> <p><i>Our people's talents and ideas will create a dynamic and innovative organisation</i></p>	<p>Recruitment in specific areas of projected need</p> <ul style="list-style-type: none"> • What is the interest of senior school students in working in the public service, particularly public education? • What is the relationship of Overall Performance (OP) entry scores for education degrees to the quality of teaching of these graduates? • What skill acquisition strategies and processes are relevant and effective for VET teachers? • What is the optimal industrial environment for attracting tradespeople to work in training? • How do the pathways into teaching in school and TAFE impact on school cultures and student learning outcomes? • What attraction and retention strategies could be applied to TAFE, VET providers, schools and the public sector to address professional shortages, and an ageing workforce?
	<p>Leadership and governance</p> <ul style="list-style-type: none"> • What are the specific leadership behaviours of school principals that build a sustainable culture of school reform and result in improved student outcomes? • What impact does school-based professional development expenditure have on shaping pedagogical reform and improving student outcomes? • What school, TAFE and public sector staffing models support the development of the workforce of the future?
	<p>Workforce capability</p> <ul style="list-style-type: none"> • What skills and capabilities are required of teachers in schools and TAFE to meet current and future social changes? • What are the essential conditions for professional development for enabling high quality educational and business outcomes in the education, training and arts portfolios?
	<p>Valuing performance</p> <ul style="list-style-type: none"> • How does developing performance support the work of individuals, teams and institutions to improve educational and business outcomes in the education, training and arts portfolios? • In what ways can workforce development improve student learning outcomes in schools, training institutions and TAFE?