

R&D HUMAN CAPITAL 1: OCCUPATIONAL MOBILITY IN QUEENSLAND

OBJECTIVE

The aim of this project is to examine the occupational mobility of workers in Queensland. It is focussing on associate professional and trade occupations within the civil construction, automotive and aged care sectors in four regions – Brisbane, Central Queensland, Sunshine Coast and Toowoomba.

The project is identifying what factors influence skilled workers to change, not to change, and to return to their occupation and what are the skills and attributes of these workers.

The Queensland Department of Education, Training and The Arts (DETA) is funding this project.

APPROACH

The project will explore the research questions using two approaches:

- 1) An environmental scan that involves a comprehensive review of literature on occupational mobility; and an analysis of existing data to select and examine those occupations in the three industry sectors that will be the focus of this study.
- 2) A 15-20 minute survey of 900-1000 skilled workers in selected occupations in the three industry sectors.

Data collected from the survey will be analysed using a variety of non-parametric (e.g. Chi-Square, Kruskal-Wallis) and parametric analytic procedures (e.g. ANOVA, MANOVA, Regression). Depending on the quality of outcomes, some higher-order modelling of associations between theoretically relevant variables may be incorporated. The factors that are found to have the greatest impact on occupational mobility might also be presented in a transition matrix to show, for example, how changes in income impacts on occupational mobility.

TEAM

Dr Sandra Haukka (QUT), Dr Peter Grimbeek (QUT), Dr Bobby Harreveld (CQU), Mr Mark Dawson (USQ), Ms Elizabeth Toohey (USC) and Mr Walter Robb (Eidos Chief Statistician).
Benefits

This project seeks to understand factors that shape the occupational mobility of Queensland workers in order to suggest ways to assist or manage the process of this mobility by the policy of governments, activities of the vocational education system, Queensland workplaces and by Queenslanders themselves.

Findings will inform stakeholders about how they could assist individuals to remain in occupations that are in high demand and to transfer to other occupations as occupational demand changes.

The final report will include recommendations around how to reduce 'leakages' caused by poor wages and conditions (or other factors) that lead to regressive moves to lower skilled occupations or withdrawal from the labour market.



The Honourable Tom Barton
immediate past Minister for Employment,
Training and Industrial Relations

The Honourable Tom Barton, immediate past Minister for Employment, Training and Industrial Relations approached Eidos Institute with a concern.

“The combined pressures of globalisation, rapid technological change and ageing are having significant impacts on almost every facet of our domestic labour market. As a result, key policy areas covering industrial structure, institutional arrangements, work patterns, skills and training need to be constantly re-evaluated to maintain our competitive edge”

THE MINISTER WANTED ANSWERS

- 1) Reasons for job mobility behavior – what causes people to move, do they return and why?
- 2) The importance of qualifications – credentialism in the 21st century. What's the nexus between jobs and formal qualifications and to what extent there may be 'over-education' in the VET sector?

In partnership with the newly formed Department of Employment, Training and Industrial Relations, the Eidos Institute began a long-term and large-scale project drawing on the resources of its key research centres and institutes.

HUMAN CAPITAL & WORKING TRANSITIONS

R&D HUMAN CAPITAL 2: THE IMPORTANCE OF QUALIFICATIONS: CREDENTIALISM IN THE 21ST CENTURY

OBJECTIVE

The Department of Education, Training and the Arts (DETA) wished to discover the nexus between jobs and formal qualifications and determine to what extent there may be 'over-education' in the VET sector. The central theme of the report is the examination of the link between modules/experience associated with jobs, versus formal qualifications. The report focuses on credentialism, knowledge and skills and their impact on employment and mobility in the labour market, especially in certain industries in Queensland.

APPROACH

DETA contracted Eidos Institute to undertake a project on The Importance of Qualifications – Credentialism in the 21st Century. The credentialism survey was sent to a sample of some 300 employers, representing construction and trades, property and business services and manufacturing groups.

TEAM

Eidos Research Fellows, Associate Professor Joseph Zajda (Australian Catholic University), who led the credentialism research project, Associate Professor Elizabeth Warren (Australian Catholic University), together with Professor Carmel Diezmann (Queensland University of Technology) formed the team.

BENEFITS

The credentialism project offers innovative and strategically significant findings for policy makers to guide education and training systems in Queensland, and suggests solutions to industry groups and employers. In particular, this project will:

- a) Measure attitudes to and the level of knowledge that the employers in Queensland have about VET and the traditional trades;
- b) Deliver essential background research with the capacity to inform policy-makers and employers about how best to improve the public perception of VET and the traditional trades.

The credentialism project seeks to inform strategic policy-makers on whether the education and training system needs to focus on providing necessary work skills, and other desired competencies through modules, or on ensuring that qualifications are completed where possible.



“The findings of the research suggest the push for contracts of training at higher VET levels may not be the preferred option for industry. Improved course based options with added work experience components might be the better way to proceed or at least offer viable options for RTOs to pursue.”

Dr Sandra Haukka
Occupational Mobility in Queensland Project Leader
and Eidos Research Fellow

R&D HUMAN CAPITAL 3: EFFECTIVE MODELS FOR EMPLOYMENT BASED TRAINING

OBJECTIVE

The project involved three components:

- 1) Examining and critically analysing existing and emerging EBT models.
- 2) Appraising emerging models and validating them with key stakeholder representatives and apprentices from selected occupations in two industries (case studies) where demand is high for new EBT models.
- 3) Assessing the utility of the 'best-fit' new EBT model(s) for the case study occupations and industries and proposing recommendations for other occupations and industries.

Five research questions were explored when determining effective models of employment based training:

- 1) In what ways are current features of EBT models considered effective or ineffective, and by whom and for what reasons?
- 2) What are the features of alternative EBT models being considered or trialled at present to secure greater effectiveness for learners and employers?

- 3) Which emerging EBT models "best fit" the needs of selected occupations in two industries and what (if any) modifications are required?
- 4) What issues need to be addressed to implement the identified 'best-fit' new EBT models in the selected case study occupations and industries?
- 5) What is the utility of the proposed new EBT model(s) in the case studies for other occupations/ industries?

APPROACH

This project explored a variety of EBT models that can respond to current issues and concerns, and minimise the limitations of existing EBT models, at the same time reasonably withstand potential issues that may arise in the future. It focused on two industry areas as case examples for exploring effective EBT models.

In choosing the industries and occupations, consideration was given to those which:

- showed activities in alternative EBT models;
- were keen on EBT models at all VET qualification levels, and higher levels in particular; and
- have future employment growth and good job prospects.

Following consultations stakeholders in industry and the VET sector, occupations in the process manufacturing industry and child care occupations in the community services and health industry were selected for this study. They both represented quite different industry types. Data was collected through face to face and telephone interviews, and via emails from seventeen participants representing the process manufacturing industry and sixteen from the child care industry.

A set of five 'best-fit' models to suit the two industries were explored. The potential for customisation and implementation of these models for other occupations and industries was then considered.

“the push for contracts of training at higher VET levels may not be the preferred option for industry. Improved course based options with added work experience components might be the better way to proceed”

Dr Sarojini Choy

TEAM

Dr Sarojini Choy, Dr Kaye Bowman, Assoc. Prof. Stephen Billett, Dr Sandra Haukka, Ms Louise Wignall.

PROJECT IMPACT

The research highlights a number of issues around improving the effectiveness of EBT models. It focuses on higher level VET qualifications (Certificate III and above) that has not received much attention to date.

Specifically, policies and legislations that are currently managed by different departments/authorities need to be synchronised to achieve effectiveness. Only through a holistic response will all parties (employees, employers, RTOs, industries and governments) see true benefits of EBT at higher levels (above Cert. III).

The proposed models could be varied/customized to suit the different contexts of the employers/workplaces/industries.

The project reports a basis for further debates, discussions and negotiations for the implementation of effective EBT models.

The proposed models inform the basis for more research to shape policies around EBT at higher levels (above Cert. III).

CURRENT IMPACT OF THE RESEARCH

The sharing of findings from the case studies has informed the different employers (who participated) and employees of various options and VET providers about what these two groups want from higher level VET. The research team was invited to present the findings at a national conference. There have been several requests for the findings.

The research was presented at the ICVET conference in NSW in August by team member Kaye Bowman. (slides already provided to NCVER) The written feedback received on 5 September was that it was “interesting, useful, timely, thought provoking, challenging informative and gave new insights and new ideas.” NSW TAFE RTOs are more informed as to what employers/employees want in higher level VET.

CONTRIBUTION TO EXISTING KNOWLEDGE

The literature review consolidates a number of reviews, reports and commentaries and presents a historical development of EBT in Australia. It also summarizes the key issues that have recurred since the introduction of EBT. The literature review in particular reminds us of the higher level VET imperative that has still not been sufficiently acted on, despite a call for this to occur over ten years ago.

The findings of the research suggest the push for contracts of training at higher VET levels may not be the preferred option for industry. Improved course based options with added work experience components might be the better way to proceed or at least offer viable options for RTOs to pursue.

Improving training is always on the agenda locally and internationally, hence there is interest in EBT models. Furthermore, there is increasing demand for more work related and work integrated learning from learners and employers. All sectors of education are striving to provide relevant skilling for a competitive market.

PAPERS/ARTICLES

A paper was presented at the 2007 AVETRA conference, as a work in progress, on the literature review. A copy was sent to NCVER.

A power point presentation including of findings was developed for the ICVET conference, with a NSW orientation.

More papers are expected to be published.

R&D HUMAN CAPITAL 4: OPERATIONS OF SCHOOLING REVIEW

OBJECTIVE

This research developed a theoretical model based on published research literature regarding the relationship between a range of variables related to the operations of schooling. The variables examined included school/campus size, class grouping (by gender or ability) and/or flexibility in hours of attendance and the social, behavioural and educational outcomes of students. This project was commissioned by the Department of Education, Training and the Arts.

FINDINGS

One significant theme that emerged from the range and wealth of the literature reviewed was that of disadvantage. Operations of schooling can impact significantly in ensuring the advantaged continue to display the best outcomes while also ensuring that the less well off become even more disadvantaged. Reforms to the operations of schooling, therefore, are an important requirement to raise the outcomes that students achieve in an equitable context. Without such reform, on the one hand the current collective of advantaged students will be sustained, but may not grow. On the other hand, the increasing collective of disadvantaged students will also be sustained, and may in fact, continue to multiply as a greater number of students fall into at-risk categories.

On the basis of removing disadvantage, and in trying to formulate a model that will bring real advantage to a greater number of students in terms of improved outcomes, the report's authors recommend a new approach to the operations of schooling – something that may 'break the mould' of current practice and establish new operations of schooling that can contribute to improved, equitable and sustainable outcomes for more students. Because of the breadth and sometimes inconsistent themes of our findings, we recommend a key concept of Structured Flexibility, a model of schooling that has the necessary

characteristics to incorporate the best of the many findings that emerged from this study.

The research of this study endorsed the centrality of teachers and their pedagogies in the successful implementation of reforms to operations of schooling.

TEAM

The Operations of Schooling Review project team was Associate Professor Juhani Tuovinen (USC), Professor Tania Aspland (USC), Dr. William Allen (USC), Leann Cresswell (QUT) and Dr Lisa Hunter (USC).

BENEFITS/IMPACT

The team has presented its findings to a research forum hosted by DETA, presented a full paper, research summary and an academic paper. The analysis and synthesis of the findings of the research have led to the generation of a set of theoretical propositions for consideration. The concept of structured structured flexibility underpins these propositions.

The Honourable Rod Welford immediate past Minister for Education, Training and the Arts.



“Eidos is treated seriously by the Government as an opportunity to draw upon the best and brightest researchers. Government is grateful for this opportunity to engage with academia.”

Minister Rod Welford, Minister for Education, Training and the Arts

The Honourable Rod Welford, Minister for Education, Training and the Arts approached Eidos Institute with a concern.

THE MINISTER WANTED ANSWERS

- 1) To what extent do operational aspects of schooling such as campus or school size/composition and classroom ability grouping influence student outcomes?
- 2) How does socio-economic disadvantage interact with school size to impact on student outcomes?

In partnership with the Department of Education, Training and the Arts, Eidos Institute began a long-term and large-scale project drawing on the resources of its key research centres and institutes...

HUMAN CAPITAL & THE OPERATIONS OF SCHOOLING

R&D HUMAN CAPITAL 5: INDIGENOUS-SELF EFFICACY

OBJECTIVE

Eidos is conducting an investigation of ‘the role of self-efficacy in identifying underachievement in indigenous students’ on behalf of DETA.

This project represents Stage 1 of a three year program of research designed to investigate the Coolibah Dynamic Assessment (CDA) methodology so as to identify best practice guidelines for identifying underachieving Indigenous students in Years 4, 5 & 6, increasing their academic self-efficacy and enhancing learning outcomes.

The overarching goal of the research program is to inform the implementation of the Identifying Indigenous Invisible Underachievement (IIIU) pilot project so as to increase the number of Indigenous students performing in the top quartile of achievers in Queensland state schools across time.

APPROACH

The study will involve observation and surveys of teachers, students and their families.

TEAM

Dr Anne Swinbourne (JCU), Gary Coventry (JCU), Associate Professor Juhani Tuovinen (USC), Mr Brendan Powell (USC) and Professor Bruce Knight, (CQU).

BENEFITS

The primary goal of this project is to assess the impact of a program currently being piloted in Queensland. The project illuminates the importance of self efficacy in the social, emotional and academic development of young Indigenous people

“We propose some new theoretical perspectives on operations of schooling for consideration – something that may ‘break the mould’ of current practice and establish new operations of schooling that can contribute to improved, equitable and sustainable outcomes for more students. Because of the breadth and sometimes inconsistent themes of our findings, we recommend a key concept of ‘structured flexibility’, a model of schooling that has the necessary characteristics to incorporate the best of the many findings that emerge from this study.”

Dr Juhani Tuovinen,
Eidos Research Fellow, University of the Sunshine Coast.