education and the future of work

a longitudinal study of work and education in Greater Western Sydney

the next generation

The Centre for Educational Research
Globalisation in Greater Western Sydney
Macroeconomic forces are continually redefining the ways in which globalisation affects education. Globally, Australia is signing free trade agreements with partners such as China and India. In Greater Western Sydney (GWS), plans are afoot to significantly increase infrastructure spending, for example, the federal government is spending 2.9 billion dollars from 2014-2018. Concurrently, state government is rapidly developing GWS and plans to increase employment and to serve the new airport that will be located in GWS.

However, despite this agreed upon economic direction and intensification in GWS, little is known about the ways in which the practises of education relate to and feed into such macroeconomic focus. For example, what will happen to families and the education of migrants given the new economic reality? How do new technological developments change or alter the face of education in this context? What new alternative pathways to work are emerging in GWS? How does the focus on Asia play out at the school level?

The Centre for Educational Research, UWS globalisation research team will be the first to put these questions to rigorous educational mixed-method research to gather and analyse comprehensive data which will in turn inform good policy for the growing GWS region.

1) This research program will support the implementation of the NSW 2021 Performance Report 2014-15 and A Plan for Growing Sydney December 2014 by:

- Discovering new data with respect to what skills sets are currently governing career choice in Greater Western Sydney (GWS)
- Generating data about new pathways and educational choices of GWS youth
- Guiding pre-service training programs and first year out teachers in terms of future vocational education
- Analysing how technology will be used as an educational and work aid
- Developing baseline data for the understanding of new jobs growth areas and GWS population needs
- Creating a platform for the creation of specialist schools and the expansion of wellbeing services through new work data.

2) This research project will support the implementation of the Western Sydney and Blue Mountains Regional Action Plan (NSW 2021) by:

- Mapping out the work needs of diverse GWS families and communities
- Encouraging skill development and career choices for vulnerable GWS populations through participatory educational research
- Enabling the construction of new school districts through systematic GWS vocational data collection

3) Lastly, this research program will support the Regional Development Report of Western Sydney Employment 2013 by:

- Researching and analysing the future educational and work needs of the GWS population through rigorous methods
Our research consists of interconnected nodes

the future of work

NODE 1: Alternative pathways to work
Dr Mohamed Moustakim & Dr Jorge Knijnik

There has been a steady increase in the number of Alternative Education providers in Australia. A report commissioned by the Dusseldorp Skills Forum identified Alternative Education programs in more than 1200 locations attended by more than 33000 young people across Australia (Te Riele, 2012). The report, ‘Learning Choices: A Map for the Future’ was the largest study conducted on Alternative Education in Australia. It aimed to provide an overview of flexible learning programs and projects aimed at young people who drop out of mainstream schools and recognized the important role that such provision plays in re-engaging ‘hard to reach’ young people in education. For example, attendance rates of young people enrolled in Learning Choices programs in 2011 ranged from 40% to 90% and up to 40% of these students completed higher level qualifications, equivalent to year 12, leading to subsequent paid employment (Te Riele, 2012).

However, the quality of education and attendant academic achievements attained in Alternative education sites are highly contested. Smyth et al. (2013) contend that despite the compassionate and caring pedagogic approaches often adopted in Alternative Education sites, lack of academic rigor and exposure to narrow, low level vocationalism, limit young people’s future life chances. They argue that rather than offering potential for development and upward social mobility, Alternative Education sites reproduce social inequality by contributing to lowering marginalised students’ expectations. Conversely, McGregor & Mills (2011) argue that Alternative Education programs offer young people from marginalised communities, environments and pedagogic approaches that are conducive to re-engagement with learning and that mainstream schools could benefit from the examples of good practice they identified.
We also take the view that Alternative Education sites provide transformative potential in helping young people make sense of their experiences as they negotiate important transitions from school to work or higher education. Moreover, whether these sites are seen as places of ‘refuge’ or as places of ‘containment’ (Nairn & Higgins, quoted in Smyth et al., 2012), their ubiquity and rapid expansion in the past two decades in many western countries is set to continue, particularly in Australia. This is in part because, at 14.7%, the secondary school dropout rate in Australia is higher than the OECD countries average of 12.9% and the European Union average of 11%. The Australian Government aims to increase completion of year 12 or equivalent qualifications to 90% nationally by 2015 (Te Riele, 2012). Recent increase in compulsory school leaving age to 17 is unlikely to make this an easy target to achieve. The national ‘Learn or earn’ policy expressed in the ‘compact with young Australians’ (Department of Education, Employment and Workplace Relations, 2010) requires young people up to the age of 17 to be in full-time education, paid employment or training. Furthermore, anyone under the age of 21 who has not completed year 12 or equivalent qualifications is not entitled to unemployment welfare payments (Te Riele, 2012).

The aim of this research node is to identify the scale and significance of re-engagement focused Alternative Education programmes in helping young people negotiate transitions to work or higher education. The research will focus on Alternative Education sites in Greater Western Sydney. It will be guided by the following questions:

- **What alternative pathways to work are there in Greater Western Sydney?**
- **How do alternative education sites help young people negotiate transitions to work and/or further education?**
- **How do some young people end up in alternative education sites?**
- **How do young people experience alternative education?**
- **What challenges and opportunities do alternative education providers face in their attempts to help young people make successful transitions to employment or higher education?**

**NODE 2: Impact on Families and Youth**

A/Prof. Christine Woodrow, Dr Criss Jones Diaz & A/Prof. Loshini Naidoo

The forces of globalisation continue to impact the form, organisation and availability of work, creating unprecedented uncertainty and precariousness regarding employment opportunities for both young and old, experienced and inexperienced workers. These forces and their effects are apparent in the daily lives of children and families as workers, both young people and older negotiate the uncertainties of an increasingly casualised workforce, temporary and fixed term contracts, irregular hours and greater competition for secure employment opportunities. This is particularly problematic for youth. Their lack of experience in developing labour market ‘know-how’ and skills renders them vulnerable to exploitation and uncertainty. Due to the ongoing forces of globalisation, they are less protected (Blossfel, Klijzing, Mills and Kurz, 2006). Evidence from Europe shows how youth are increasingly more vulnerable, and experience more uncertainty in employment (Blossfel et al., 2006). While lower skilled and less educated youth are more vulnerable to such forms of uncertainty, Blossfel et al. (2006) argue that more educated white collar
workers are also impacted by short-term contracts and uncertainty. However the difference for this group, they argue is that they are more readily able to use short-term contract employment as bridging opportunities, whereas lower skilled workers remain trapped in lower skilled labour markets.

For families, these factors create circumstances in which security of income, housing and education remain unpredictable, together with an increased demand for flexibility and affordability of childcare arrangements, in a context where family and employment mobility constrains the capacity of extended family to contribute to these arrangements. Such precariousness also impacts on the capacity of the family to provide optimal conditions for their children’s wellbeing and early learning.

By understanding globalisation as a ‘multi-layered process’ (Rana, 2011) rather than ‘a single or universal phenomenon (but)...nuanced according to locality (local area, nation, world region), language(s) of use, and academic cultures’; (Marginson, in Mayo, 2009, p. 87) invites us to pay attention not only to differentiated local effects but also to the complex interface between the local and global. Recent studies detail these differential and uneven effects. Research consistently demonstrates that the negative effects of globalisation are most keenly experienced by disadvantaged communities (MacKinnon, Danny, Cumbers et al., 2011), immigrants and those in low status, service and domestic work (Parrenas, 2001). For example prospective employees are expected to have skills and knowledge that enable them to deal competently in a wide range of situations with a diverse group of people. The reconceptualization of English Language support in schools and universities therefore involves a shift from a limited focus on generic grammar and vocabulary to one that integrates language with social practices of meaning making and interpretation across the curriculum. English language support therefore should not only facilitate communication, but should be viewed as the process and product of that communication. The support needs to be fully integrated into disciplinary pedagogic practices, recognizing that discipline-based constructed knowledge needs to be mediated as well as modified (Arkoudis, 2014). Additionally international research calls attention to how unregulated work such as service and domestic roles are increasingly taken up by immigrant women leading to excessive working hours that impact severely on family life.

Therefore in knowledge-based globalised societies such as Australia, as youth unemployment continues to rise, and younger people are less able to move out of the family home, the impact of youth employment on families and the role of schooling and higher education is yet to be fully researched in the context of globalisation, the future of work and inequality of uncertainty for youth. Given these conditions, coupled with government-led expectations of increased infrastructure spending in the GWS region, and the promise of employment opportunities a range of research questions associated with such issues might include:

What does the future of work hold for young people and their families?

- **How are the forces of globalisation and their impact on employment apparent in the lives of families in Western Sydney?**

- **How does precariousness and uncertainty impact on families and youth in terms of relationships, family structure and family income?**

- **What are the effects of changing work patterns on children’s learning in the early years and on family requirements for quality childcare and arrangements?**

- **What is the impact on early education and the early childhood industry and how do these organisations need to respond?**

- **What is the relationship of educational outcomes, to the economy and society?**

- **What is the relationship between schooling and work for young people**
Problem solving is arguably the most important cognitive process in our everyday life. In our everyday context, we engage in a variety of problems that require different levels of cognitive engagement and most of these problems are ill-structure in nature. While real world problems are typically complex and ill-defined, they are also unpredictable and contextualized. Although problem solving has been integrated into classroom teaching, research has consistently suggest that problem solving activities do not help learners to develop a deep understanding of concepts and principles and let alone achieving the transfer of knowledge (Jonassen, 2006). One of the reasons for such shortfall includes the focuses on well-structured problems in traditional classrooms which are insufficient to prepare learners for real-world challenge once they leave the school system. Jonassen, Strobel and Lee (2006) studied how engineers solve problems and engineers consistently said that universities do not sufficiently prepare learners in solving real world problems. The other reason is that research has yet to fully understand the complexities involved in problem solving, especially in the real world context. Many researchers have examined the roles of technologies in problem solving and argued that technologies could foster different problem solving skills. For instance, the use of computational systems dynamic tools help learners to develop causal reasoning (Lee & Murcia, 2012) which is one of the most important skills in problem solving. Studies have also suggested that technologies enable learners to build problem representation so powerful that it helps them to identify the problem space. However, the relationship between the use of various technologies and real world problem solving is still unclear.

Given the importance of problem solving and the roles of technologies in problem solving, it is critical to explore the following issues:

- What are the specific features of problems encountered in various work or education contexts? What are the success criteria for solving such problems?

- How do people learn to solve different types of problems? What are the roles of technologies? What roles do technologies play in qualitative and quantitative problem representations? How do people analyse tasks for effective problem solving?

- How different novices and experts in various fields solve problems? How do we ensure transfer of knowledge through the use of technologies?

- What are the roles of metacognition and epistemological beliefs in solving different kinds of problems? Can technologies play a critical role in empowering people with more sophisticated metacognition and shift their epistemological beliefs for constructive problem solving?

- What instructional design considerations are needed for effective teaching/training in the problem solving environments?
Given the context of this research agenda, specific research questions include:

- **What needs to be done in pre-service teacher training programs to contribute to the development of school students’ work readiness, work connectedness and work education in the context of the NSW and Australian “China Strategy” and the Asian Century policy?**

- **What are teacher educators and teacher education researchers’ role in supporting schools to develop new curricula, pedagogies and policies to address school students’ future work readiness and work connectedness in addressing the multilingual, inter-lingual and inter-culturally global/local labor markets?**
Our Centre for Educational Research Team - Globalisation

Along with research excellence this UWS team brings research leadership in the Globalisation and Educational Practice in the locale of Greater Western Sydney. This thematic program interrogates and acts upon the effects of population mobility and rapid social and economic change.

This comprehensive research will help inform local and state policy for the impending growth of Greater Western Sydney.

A/Professor David R Cole will lead the research program. He is the leader of the globalisation strand of research in the Centre for Educational Research (CER). David is an expert in mixed-methods educational research and educational philosophy. He has been involved in 14 national and international funded research projects and with funding worth $750k+. David has published eleven scholarly books and has produced 100+ peer-reviewed papers, book chapters, conference papers and other public outputs. David has been working on the intersections between globalisation, educational practice and research since the 1990s.

A/Professor Chris Woodrow is a senior researcher and Deputy Director of the Centre for Educational Research at the University of Western Sydney. Dr Woodrow’s research includes early childhood policy analysis, transnational investigations of professional identities, investigating parent involvement, literacy and numeracy learning at home and at school, and the nexus between early childhood education and school. Her most recent research has been focused on developing sustainable models of pedagogical and community leadership with a particular focus on parent engagement pedagogies in vulnerable contexts. She has just completed a 6 year transformational project in Chile where her research identified a range of issues related to engaging parents and generated innovative approaches to involving them as partners in their children’s learning. The project findings have also informed recent research in Mt Druitt exploring constructive approaches in the preschool. She has also conducted research with vulnerable or low income families investigating their participation in community hubs.

A/Professor Loshini Naidoo’s research focuses on transnationalism, social justice, cultural diversity and the literacy and language development of refugees in Australian high schools. Most important to her current research is an understanding of the causes and consequences of forced migration in order to support refugee students’ transition to tertiary education. Possessing the knowledge and pedagogical skills to deal with the challenges of forced migration are essential for educators, both for the development of effective teaching and learning programs and for analysing the links between forced migration and processes and patterns of globalisation.

Loshini’s research is important for the globalisation strand of CER because it considers ways of addressing the tension between a globalised world and the barriers refugee background students face in education.

Dr Mohamed Moustakim is currently a Lecturer in education at the University of Western Sydney and a member of the Centre for Educational Research. His career in education began as a Teacher in North Africa in the early 90’s and subsequently a Youth Worker in London for several years. Prior to joining UWS, Mohamed taught in Youth and Community Education Studies programs at a number of universities in the UK. Equity and diversity issues in education alongside designations of ‘at-risk’ youth and alternative forms of schooling have been central to this teaching and his research interests, which are focused around identifying the barriers that prevent young people from marginalised groups from making successful transitions through education and employment.
Dr Jinghe Han's is a Senior Lecturer in the Centre for Educational Research, School of Education, University of Western Sydney. She teaches a sociology subject (Diversity, Social Justice and Equity) and is also an advisor in Academic Literacy for Master of Teaching students. She has an ongoing lecturing role in a ten-year program of research and teacher education with international students from Ningbo (Research Orientated School Engaged teacher Education Program) and supervises a cohort of Higher Degree Research (HDR) students in this program.

Her research interests and publications include: discourse analysis, bilingual teacher education, L1/L2 transfer, internationalization of HDR education, and research information literacy. She is on the Editorial Board of Asia Pacific Journal of Teacher Education and was a member of the Executive Committee of ATEA during 2011 and 2013.

Dr Chwee Beng Lee is a well-recognized researcher in the field of learning technologies and has extensive research and training experience in the areas of problem solving, learning technologies, conceptual change, evaluation and instructional design. She was a consultant to the Singapore Armed Forces training Institute from 2005 to 2011 where she trained a large number of military officers in the areas of evaluation and instructional design. Chwee Beng has published more than 35 peer reviewed journal articles and is currently the Senior Associate of The Asia Pacific Educational Researcher (TAPER) and serves in various journal editorial boards.

Dr Jorge Knijnik’s research interests range from sport in society, culture and history, to gender and human rights education, to physical education pedagogies, to drama studies and fandom culture. His current research examines the socialisation process within football fans in Greater Western Sydney and how football fandom has the potential to make a significant contribution to community cohesion, education and social regeneration in the area. He is also involved in a number of projects looking at the political and cultural contradictory legacies of sports mega events in Brazil. It was in his home country where, as a social and education worker, Jorge spent considerable time in the slums of São Paulo, where there are extensive and systematic human rights violations - including serious child abuse - introducing systematic initiatives to improve sanitation, minimise health problems (including sexuality programs), and promote accessible sport and exercise programs as alternatives to self-destructive or socially dysfunctional behaviours. Jorge has published eight scholarly books and more than 80 peer-reviewed journal articles, book chapters and conference papers. Jorge was a recipient of a 2014 Citation for Outstanding Contributions to Student Learning (Office of Learning and Teaching) and the recipient of the ‘Building the Gender Equality’ prize awarded by the Brazilian Research Council and UNIFEM.
About the Centre for Educational Research

The Centre for Educational Research focuses on creating sustainable communities and equitable futures through world class research and research training structured around core themes of Sustainability, Equity and Globalisation. Educational curriculum and pedagogies are the linking themes throughout.

The Globalisation and Educational Practice thematic investigates the processes of globalisation in the locale of Greater Western Sydney; nationally and internationally in order to inform and direct educational research, policy and practice. This thematic program interrogates and acts upon the effects of population mobility and rapid social and economic change. Specifically, this research program addresses the responses to education and learning arising from globalised neoliberal market forces.

For further information, please contact:
Associate Professor David Cole
Theme Leader - Globalisation
The Centre for Educational Research

Email: david.cole@uws.edu.au
Tel: +61 2 4736 0154
www.uws.edu.au/cer