

## Impact case study (REF3b)

<b>Institution:</b> University of Derby
<b>Unit of Assessment:</b> Business and Management Studies
<b>Title of case study:</b> Enterprise and Entrepreneurial Education
<b>1. Summary of the impact</b>

This case study focuses upon enterprise and enterprise education. It describes the impact of intellectual endeavours in this area, mainly surrounding the production of a framework to foster entrepreneurial behaviour, and the emergence of an enterprise support approach that continues to support entrepreneurs.

Impact includes:

- Informing the approach taken by enterprise initiatives toward enterprise development, and challenging existing practice on enterprise education (particularly using findings around learning process, active learning and cohort-based enterprise education);
- Increased enterprise start-up rates and sustainability of start-ups through enhanced enterprise activity and initiatives secured as a result of the research profile gained (also indirectly contributing towards economic sustainability);
- Development of resources (both HE and practitioner) which took a new approach to enterprise education, based on the underpinning research;
- Policy implications locally and regionally.

<b>2. Underpinning research</b>
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The research underpinning the impact and detailed in this case study centres on several interconnected outputs and projects on entrepreneurial learning, mid-career entrepreneurs and enterprise education. The *Centre for Entrepreneurial Management* gathered momentum through the numerous outputs (2000-2006) of **Rae and Carswell**, and through a process of continual learning, went on to produce several successful entrepreneurial learning approaches. The enterprise support that ensued has significantly impacted entrepreneurs, SMEs, and graduates, particularly in the East Midlands.

Enterprise and entrepreneurial research was initially led by **David Rae**, Former Director of Enterprise Development (2001-2006), and **Mary Carswell**, Former Dean and Director of DBS (1999-2006). It has since been developed by several researchers including: **Naomi Woodier-Harris**, Associate Lecturer, PhD Researcher (2002-2012); **Simon Gee**, Senior Lecturer in Enterprise and Entrepreneurship (2002-current); **Rob Moon**, Senior Lecturer in Enterprise and Entrepreneurship (2002-current); **Christine Jones**, Subject Head - Marketing, Strategy and Logistics (2003-current); **Professor Peter Wyer**, Subject Leader in Enterprise/Entrepreneurial Management (2007-2008); **Vic Curtis**, Lecturer in Entrepreneurial Management (2007-current); **Bruce Johnstone**, Enterprise Development Fellow (2010-2011).

In the late 1990s, **Rae and Carswell** commenced a study on how individuals learn entrepreneurial behaviour and how entrepreneurial capability is developed. They used life story interviews to explore the stories of 13 individuals ('exceptional performers') who had demonstrated entrepreneurial attainment in running a range of business ventures. Two-hour semi-structured life story interviews were conducted asking participants to tell their story from childhood to present. Professional business valuation intermediaries assisted in the selection of individuals who had to meet a number of criteria, including that the individual has started a new business and achieved growth of £2m turnover in 5 years; or acquired an existing business and improved performance and value substantially; and/or who have a majority or significant equity stake in the business. As such their research considered the link between entrepreneurial success and the learning process that preceded an individual's entrance into business. Through this research, **Rae and Carswell** (2000a) found the development and organisation of personal theory (individual learning episodes) to be highly significant to entrepreneurial learning; a factor previously ignored in entrepreneurial theory. Their research provided greater understanding of the entrepreneurial process and identified features that could inform the design of entrepreneurial learning experiences. Whilst research existed on entrepreneurial personality

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and education prior to their work, it was seen that no approaches had 'provided an understanding of the nature of entrepreneurial learning...capable of both theoretical and practical application' (**Rae and Carswell**, 2000a, p.151). **Rae and Carswell** (2000a) found that individuals tended to make sense of their entrepreneurial learning experiences through 5 distinct stages: (1) early life, (2) early career, and the process of (3) entering ventures, (4) growing ventures, and (5) moving on from ventures. This staged process highlighted the integrated and interdependent nature of the learning process, whereas other research had overlooked this. As a result, **Rae and Carswell's** work had implications for entrepreneurial practice, education and policy.

In 2000, **Rae and Carswell** revisited this research to make a case that enterprise development programmes should place a greater emphasis on personal development. They also stressed that a greater understanding of the process of entrepreneurial learning was needed to advance entrepreneurial activity. Those who actively learned and formed social relationships saw superior entrepreneurial performance. The opportunity to work actively and form social relationships would later underpin many of the initiatives that the Centre impacted, particularly through cohort-centred enterprise education, and opportunity to learn through practice.

**Rae** later conducted research among 30 entrepreneurs, developing practical theories from their life story accounts (2004). This resulted in a framework for interpreting entrepreneurial learning. In 2005, **Rae** presented additional research on learning needs and processes of mid-career entrepreneurs. His research centred upon emerging mid-career entrepreneurs (MCEs), studying on a postgraduate entrepreneurship course. This research proposed several measures for enhancing MCE learning, which led to changes to practice still seen in the present day. In 2007, **Rae** stressed the need for entrepreneurial management capability, noting that both management and innovation are required, purism on either part does not work effectively; this later provided a grounding for the NESTA 'Creative Business Catalyst' project.

**Rae and Carswell's** research shaped the focus for the *Centre for Entrepreneurial Management* in DBS, which emerged after their arrival in 2000. The Centre established itself as a researching and employer-focused unit to encourage small business engagement and exchange knowledge. This developed, with the addition of **Moon** and **Gee**, to also focus upon how this learning could inform the HE and practitioner curriculum for business and enterprise students in DBS. Over time the Centre's work developed a model for a virtuous learning circle between small businesses, researchers, and the curriculum; creating a valuable circle of expertise, knowledge transfer and vast opportunity for impact. Start-ups, existing SMEs, individuals, and students in Derby, Derbyshire and the East Midlands benefitted from this research, and through conferences this was disseminated to national and international communities (**Gee** and **Moon** were awarded best paper in 2006 at the Entrepreneurship, Innovation and Small Business (EISB) Conference).

### 3. References to the research

1. Rae, D. and Carswell, M. (2000a), 'Towards a Conceptual Understanding of Entrepreneurial Learning', *Journal of Small Business and Enterprise Development*, 8(2), pp.150-158. DOI: 10.1108/EUM00000000006816 (ABS, 2\*)
2. Rae, D. (2004), 'Practical Theories from Entrepreneurs' Stories: Discursive Approaches to Entrepreneurial Learning', *Journal of Small Business and Enterprise Development* 11(2), pp. 195-202, DOI: 10.1108/14626000410537137 (ABS, 2\*)
3. Rae, D. (2007) *Entrepreneurship: from opportunity to action*, Palgrave Macmillan, Hampshire. ISSN: 1403941750

### 4. Details of the impact

**Rae and Carswell's** research has significantly influenced the way in which enterprise initiatives and enterprise advisers/educators have approached entrepreneurial learning and education. Driving this research through to shape the Centre has generated further reach and significance by enabling the Centre to: secure several successful projects, support hundreds of enterprises, and enhance the personal and business growth of many entrepreneurs.

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The Centre attracted 4 KTPs, for example in *Orchid Business Computing Ltd* and *Trans Oceanic Meat Co (Nottingham) Ltd*. In the case of the latter, **Rae** used his work to develop entrepreneurial learning and decision-making which assisted KTP associate, **Grieve**, to work entrepreneurially in order to do make an impact on process, and in turn financially benefit his organisation. **Grieve** was able to save the company £100,000 per annum as a result of changes to process that he instigated (University of Derby, 2005).

The Centre attracted funding for the 'Achieving Business Focus' and 'New Venture' programmes. 'Achieving Business Focus' (ABF) used **Rae's** research on MCEs to concentrate on mid-career support. The programmes used **Rae's** life story research to encourage entrepreneurs to reflect on their life story and make a step change to their business. 72% of businesses participating in ABF reported job creation (15.5 in total) or safeguarding of jobs (67.5 safeguarded) (Mosley, 2006, p.4). 77% reported that they had improved the delivery of products and services as a result of the programme, demonstrating change in process and practice (Mosley, 2006, p.7). The 'New Venture' (NV) programme was utilised the practical approach and networking/cohort learning advocated by **Rae** (2004) and colleagues in the Centre. By the conclusion of this programme 62% of participants reported that they felt clearer about their business opportunity post-intervention (Mosley, 2006, p.13). NV delivered a toolkit that entrepreneurs/aspiring entrepreneurs could study in their own time; this later used technology (CD-ROM toolkit) and was used to develop practitioners.

Working the *Derby and Derbyshire Enterprise Partnership (DDEP)* the Centre demonstrated significant regional impact through the highly successful '*Enterprising Derbyshire*' Programme. This followed and utilised **Rae** and **Carswell's** focus on skills required for an individual to be entrepreneurial. The results showed consistent improvements in turnover, profitability and employment opportunities. Measuring the 6-month impact of '*Enterprising Derbyshire*' in 2006/2007, 32% of businesses had taken on additional staff. Of those that had started trading: 64% reported increased turnover (36% reported a significant increase) and 56% reported increased profitability (3<sup>rd</sup> Avenue, 2007). By March 2008, businesses involved with the programme had created 36 jobs, and safeguarded a further 5.5 (3<sup>rd</sup> Avenue, 2008).

**Rae's** research (2004) unveiled the need for continuous education and mentoring for early start-up businesses, as well as the importance of 'learning through doing'. On this basis the '*Student Placement in Enterprise Education*' (SPEED) initiative was launched (2008). This was distinctive in providing funding for students to take a trial and error approach to starting a business. Over 73% of participants demonstrated good entrepreneurial qualities after the initiative, by going on to start their own business (**Woodier-Harris**, 2010, p.471). **Woodier-Harris's** work on entrepreneurial careers was inspired by **Rae's**, particularly the critical incidences in an entrepreneur's learning journey. This in turn informed the SPEED programme through the emphasis on cohort learning and social relationships (emphasised by **Rae and Carswell** (2000b) and later by **Woodier-Harris**). The impact was felt among the student community, business start-up community, and in the region through its economic benefits (University of Derby, 2007).

DBS was one of only 4 business schools chosen to be involved in the '*Creative Business Catalyst*' development project (2008-2009) (funded by NESTA and HEFCE). This cross-sector project linked MBA students with creative businesses to allow each to influence the other. By the end of this pilot it was deemed to be an outstanding success and there were recommendations for a full roll-out.

*Enterprise Inc* ran (funded by East Midlands Development Agency (EMDA) and ERDF) ran in 2008-2009. The Centre's findings on cohort learning were used to shape the delivery model. The success of this included 463 individuals assisted to start a business (against a target of 400) by its evaluation in 2011; this success led to the Centre's involvement in '*Enterprise Inc 2*' (**Dixon**, 2011). Successful case studies are plentiful (University of Derby, 2010b).

In 2008-2011, '*Ingenuity*' (funded by EMDA) began, in collaboration with two local universities. 'Ingenuity' facilitated knowledge dissemination, identified challenges with SMEs and looked to address these through action-based approaches, and drew in University and partner expertise to provide enterprise support. **Rae's** work on practical theory was used to inform this action-based approach. In an interim report in July 2010 (Momentum Associates, 2010), the programme had already reached 750 businesses through networking and showcasing events, and 108 businesses

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through one-to-one knowledge transfer support. There are many success stories (University of Derby, 2010a).

The 'Innovation Axis' (2009-2010) initiative provided SME's with the opportunity to observe good practice and engage with peer-peer learning. **Rae's** (2005) research on entrepreneurial learning and learning cycles informed this initiative, and led to the innovations of entrepreneurs being captured and cascaded to other SMEs through mentoring activity (University of Derby, 2011).

**Rae's** findings (as well as the Centre as they learned from and progressed **Rae's** work) led to changes to conventional practice in enterprise development. This has become a cornerstone for several business growth initiatives in the East Midlands, including the current 'Let's Do Business' (2013-2015), an ERDF funded project for enterprise support for graduates, young employed and those displaced from private and public sector jobs.

#### 5. Sources to corroborate the impact

1. 3<sup>rd</sup> Avenue Ltd (2007) "Survey of The Enterprising Derbyshire Programme – Spring 2008 Attendees", June 2007
2. 3<sup>rd</sup> Avenue Ltd (2008) "Survey of The Enterprising Derbyshire Programme – Spring 2008 Attendees", November 2008
3. Dixon, G. (2011) "Enterprise Inc: ERDF Project Evaluation", August 2011
4. Momentum Associates (2010) "External Evaluation of the Ingenuity Programme on behalf of University of Nottingham, Nottingham Trent University and University of Derby", *Interim Report*, July 2010
5. Mosley, L. (2006) "Project Closure Report, Achieving Business Focus and New Venture Programme", May 2006
6. Rae, D. and Carswell, M. (2000b), 'Using a Life-Story Approach in Researching Entrepreneurial Learning: The Development of a Conceptual Model and Its Implications in the Design of Learning Experiences', *Education + Training* 42(4), pp. 220-228
7. University of Derby (2005) "Meat firm now quids in thanks to graduate", 20 July 2005, Online: <http://www.derby.ac.uk/news/meat-firm-now-quids-in-thanks-to-graduate> (PDF alternative available)
8. University of Derby (2007) "Speeding ahead for student business success", 9 August 2007, Online: <http://www.derby.ac.uk/news/speed-ing-ahead-for-student-business-success>
9. University of Derby (2010a) "University Partnership Helps On Journey To 'Zero Carbon'", 23 March, Online: <http://www.derby.ac.uk/news/university-partnership-helps-on-journey-to-zero-carbon>
10. University of Derby (2010b) "Pretend people and forged artworks at trade fair", 30 September, Online: <http://www.derby.ac.uk/news/pretend-people-and-forged-artworks-at-trade-fair>
11. University of Derby (2011) "First 'Creative Garden' To Help Businesses Bloom", 25 February, Online: <http://www.derby.ac.uk/news/first-creative-garden-to-help-businesses-bloom>.
12. Woodier-Harris, N. (2010) "Evaluating the impact of SPEED on students' career choices: a pilot study", *Education + Training*, 52(6/7), pp.463 – 476, DOI: [10.1108/00400911011068423](https://doi.org/10.1108/00400911011068423).