

Enterprise Education in Vocational Education

Palgrave Macmillan publishes the following similar titles in this area:

BUSINESS AND EDUCATION IN THE MIDDLE EAST

Edited by Nehme Azoury

ISBN 9781137396945

THE BUSINESS GROWTH BENEFITS OF HIGHER EDUCATION

Edited by David Greenaway and Chris D. Rudd

ISBN 9781137320698

SHAPING THE FUTURE OF BUSINESS EDUCATION

Edited by Gordon M. Hardy and Daniel L. Everett

ISBN 9781137033376

INNOVATION IN BUSINESS EDUCATION IN EMERGING MARKETS

Edited by Ilan Alon, Victoria Jones and John R. McIntyre

ISBN 9781137292957

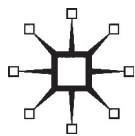
Enterprise Education in Vocational Education

A Comparative Study Between Italy and
Australia

Daniele Morselli

University of Helsinki, Finland

palgrave
macmillan



© Daniele Morselli 2015
Foreword © Umberto Margiotta 2015
Foreword © Massimiliano Costa 2015

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No portion of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The author has asserted his right to be identified as the author of this work in accordance with the Copyright, Designs and Patents Act 1988.

First published 2015 by
PALGRAVE MACMILLAN

Palgrave Macmillan in the UK is an imprint of Macmillan Publishers Limited, registered in England, company number 785998, of Houndmills, Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

Palgrave Macmillan is the global academic imprint of the above companies and has companies and representatives throughout the world.

Palgrave® and Macmillan® are registered trademarks in the United States, the United Kingdom, Europe and other countries.

ISBN 978–1–137–55259–4

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

A catalog record for this book is available from the Library of Congress.

Contents

<i>List of Tables, Figures and Photographs</i>	vi
<i>Foreword by Umberto Margiotta</i>	x
<i>Foreword by Massimiliano Costa</i>	xiii
Introduction	1
1 Why Entrepreneurship?	5
2 Learning Between School and Work	29
3 The Comparative Research	57
4 The Italian Change Laboratories	82
5 The Australian Change Laboratories	106
6 Italy and Australia: A Comparative Perspective	132
7 Conclusions: Vocational Education and Entrepreneurship Education Face Their Common Zone of Proximal Development	171
<i>Notes</i>	192
<i>References</i>	195
<i>Index</i>	206

Tables, Figures and Photographs

Tables

1.1	General unemployment and youth unemployment rates (per cent) in key OECD countries	8
2.1	The European key competences for lifelong learning	40
2.2	The 7th European key competence on the sense of initiative and entrepreneurship	41
2.3	Definition of entrepreneur, entrepreneurial activity and entrepreneurship	43
2.4	Twelve basic rules about entrepreneurship a high school student should learn	46
2.5	The phases of expansive learning	52
3.1	Timeline of the overall project	61
3.2	Field research in Italy and Australia	65
3.3	The Change Laboratory workshops in numbers	66
3.4	Type of mirror materials shown to the participants in Italy and Australia	71
3.5	The follow up actions in Italy and Australia	73
3.6	Descriptors of knowledge, skills and attitudes related to the 7th European key competence of the sense of initiative and entrepreneurship used in the multiple choice questionnaire	76
3.7	Examples of descriptors of the EQF levels utilized in the questionnaire for knowledge and skills	79
3.8	The five open questions used in the qualitative part of the questionnaire	80
4.1	Fifth meeting, mirror material. The sense of initiative in the Australian school	97
5.1	Charter of learning and teaching on general skills at the Catholic Regional College	108
5.2	Certificate II in Community Services delivered at the school. Example of grid used to assess the student's employability skills	110
5.3	Certificate III in Childcare jointly delivered by the RTO and the school. Observational grid used by the	

teacher to assess the student's performance in the workplace	111
5.4 Points 5 and 6 of the memorandum sent by the RTO to the Certificate III Childcare students during the second term	113
5.5 First workshop, mirror material. Outcomes of a meeting between the VET coordinators and the RTO's teacher/course coordinator. Changes the Certificate III in Childcare would undergo the following year	115
5.6 Transcription of part of the first meeting	117
5.7 Transcription of part of the second meeting	120
5.8 Sixth meeting, mirror material. Summary of the interview with the RTO's childcare centre director	127
6.1 Comparison of the two settings where the study was conducted	133
6.2 Comparison of the knowledge, skills, habits of the competence on the sense of initiative and entrepreneurship	136
6.3 Comparison of Australia and Italy. Students' perceived level of knowledge according to the EQF descriptors	137
6.4 Comparison of Australia and Italy. Students' perceived level of skills according to the EQF descriptors	138
6.5 Comparison of Australia and Italy. Students' perceived level of habits	139
6.6 Open question on how to improve the overall project (work experience plus Change Laboratory) in Italy	151
6.7 Open question on how to improve the Certificate III in Childcare	152

Figures

3.1 The Engestrom triangle (1987, p. 78) is used by the students to illustrate their workplace	70
4.1 Example of students' group work. Representation of their workplace in terms of the Engestrom triangle	87
4.2 Second meeting. Schedule of the workshop	88
4.3 Second meeting. Group work made by the students	91
4.4 Third meeting, mirror material. Entry questionnaire on the sense of initiative and entrepreneurship, figures for knowledge	92
4.5 Third meeting. Group work made by the students	94

4.6	Seventh meeting, mirror material. Diagram representing the historical evolution of work experience at the school	100
5.1	Second meeting. Summary of the first workshop. The Engestrom triangle is used to show work activity in the workplace seen from the student's point of view	119
5.2	Fourth meeting. School and workplace seen as two interacting activity systems	123
5.3	Fifth meeting. Brainstorming on how to make the teacher's handover easier	125
5.4	Sixth meeting. The problem the young people are facing (are they students or workers?) is conceptualized as contradictions in the activity system through the Engestrom triangle	128
6.1	Comparison of Australia and Italy. First open question: What is a sense of initiative and entrepreneurship?	142
6.2	Comparison of Australia and Italy. Second open question: What do you think you have gained from participation in the Change Laboratory?	144
6.3	Comparison of Australia and Italy. Third open question: What do you think the strengths of the Change Laboratory are?	145
6.4	Comparison of Australia and Italy. Factual benefits of the Change Laboratory	146
6.5	Comparison of Australia and Italy. Relational benefits of the Change Laboratory	147
6.6	Comparison of Australia and Italy. Fourth open question: What do you think the weaknesses of the Change Laboratory are?	149
6.7	Diagram on the sense of initiative according to the students	153
6.8	Banner made by the first group of students on the ideal work experience	155
6.9	Banner made by the second group of students on the ideal work experience	157
6.10	Poster made by the students during the fifth workshop on the perfect teacher	158
6.11	Poster on mutual expectations made by the students during the sixth workshop	159

Photographs

- | | | |
|-----|---|-----|
| 4.1 | Second meeting, mirror material. Students taking measurements in a building under construction | 89 |
| 4.2 | Third meeting, mirror material. Work tutor negotiating about progress with the subcontractors, the students assisting | 93 |
| 4.3 | Seventh meeting. The video of the presentation of the students at the building sites of Milan being projected as mirror material during the Change Laboratory | 102 |

Foreword

Umberto Margiotta

Over the last 20 years there have been a great number of studies about the ways in which traditional learning is considered, both in formative and school contexts. Three types of issues have emerged from considering the formative success of the individual:

- a) *Cognitive problems*: the competencies acquired in the school context are rarely utilized to deal with experiences and problems in life contexts;
- b) *Social problems*: the individuals generally privilege the models of social success rather than the models acquired in situations of formal learning; and
- c) *Diffusive innovation deficit*: both companies and educational institutions are enterprises dealing with “the distribution of knowledge and rules”, where competencies that cannot be learned elsewhere are acquired.

As a consequence, our society appears segmented. The continuity between formative contexts and work and life environments does not proceed in an orderly fashion. On the contrary, a deep division is produced between formal intelligence and practical intelligence.

I followed Daniele Morselli’s project with growing interest, since it is related to the issues above. I observed the way he was nurturing a meaningful research programme, and the work he presents on his workshop on entrepreneurship education in this book illustrates the elements of such a programme. The programme starts from the observation that the relationship between training and agentivity is rapidly changing; every person has the frequent need to reorganize and reinvent his or her knowledge, competences and work. This is the reason that the goal of education cannot be to pursue the development of techniques and skills, but rather to accompany one’s personal learning, so that it can evolve into a system of boundary crossing actions to allow each individual to deal with and master the uncertain and mutable trajectories of change within specific situations.

How can we understand the modalities and shapes of such learning? The originality of Morselli's proposal stems from this point: starting from the third generation of activity theory, Morselli shows how Engestrom's theory of expansive learning differs significantly from the other contemporary theories of adult learning such as Mezirov's theory, the theoretical framework of the community of practice by Wenger and, especially, Kolb's theory of experiential learning. From these differences Morselli designs, experiments and generalizes his workshops for entrepreneurship education.

The most important difference from the expansive learning theory and the other learning theories is that every human activity is characterized by the participation of the individuals in complex contexts of collective action that comprehend diverse entities in relation to one another, such as subjects, mediational artefacts, community, rules and procedures, division of labour, results and object. In so doing, the paradigm of distributed cognition analyses cognition and learning by representing them as collective activities mediated by not only cultural artefacts (tools and signs), but also rules, community and division of labour. Learning is therefore much more than Kolb's paradigm of experience, and much more than the phenomenology of individual transformation as described by Mezirov. The perspective of expansive learning frees the analysis and the evaluation of meaningful learning from Rousseauist naturalistic revisionism. Learning is characterized as a process of transfer gained through the interaction of systems made of collective entities.

The perspective inspected by Morselli considers the transactional perspective (besides the dialogical perspective) between activity systems, and allows the freeing of the concept of entrepreneurship from its neoliberal and voluntarist drifts which are unfortunately still prominent today. I have always reminded Morselli that the conceptual focus of his research was on enterprise education as a pedagogy, rather than on entrepreneurship, a term reckoned to be more "fashionable". The concept of boundary crossing results not only in the way two activity systems meet and 'contaminate' each other, as stated by Wenger. Boundary crossing also depends by the generativity of learning for both individuals and for collective entities. By generative I mean that learning generates new horizons, new possibilities and new trajectories of life and cognition.

Most importantly, it is not possible to confuse Engestrom's expansive learning with Wenger's community of practice. The latter studies the processes of acquisition of knowledge in adult groups basing on the

conception of learning as participation in situated and contextualized practices. In so doing, learning dynamically interacts with the processes of construction of the individual identity. It is a social theory of learning inspired by Vygotskian reflections, whereby social participation is characterized by learning and knowing. However, Wenger's theory does not explain in a transactive and generative way the learning transformations.

Yet by following Engestrom, Morselli illustrates how it is possible, within formative workshop contexts, to overcome the dichotomy between organizational learning and organizational transformation. In order to trigger expansive learning cycles in an environment, the individuals have to deal with the internal contradictions characterizing the organization and confront them. The learning actions related to expansive learning are realized through collective and recursive processes of negotiation of meanings.

We cannot but wish that the author continues his research programme, since it certainly brings advancement to pedagogy and educational research.

Umberto Margiotta
Ca' Foscari University of Venice

Foreword

Massimiliano Costa

In this day and age the job market calls not only for the development of new and complex professional skills and abilities, but also for a professional competency needed to master ever-changing problems in the best way.

It is the role of education to provide young people with the competencies needed in society, education that could and should be delivered according to a capability approach as developed by Sen. The main focus of the capability approach is on what people are able to do – that is, are capable of. *Agency* freedom is a core ingredient of positive social change: individuals can act to bring about changes valued as important for them and their communities. The collective spaces where individuals can discuss and make decisions about things they value as important are vital to improving their capabilities.

Nurturing the students' *agency* does not only mean giving them the necessary practical knowledge through which to master different situations. More importantly, agency entails an openness to change, the readiness to reflect upon experience, an intellectual activity beyond action, the willingness to learn and work with others in the workplace, and being able to conjugate thinking and action. This vision of agency goes well beyond a neoliberal perspective based on the functional needs of a school oriented to the job market, and promotes the student's creative freedom when confronted with problems in the work or school contests. Agency becomes the ability to make use of resources, preferences, attitudes and values towards the student's future projects: professional choices in employed or self-employed jobs that are important to them.

The role of education in promoting an entrepreneurial mindset has recently gained importance within the European strategies for employment: the sense of initiative and entrepreneurship is defined by the European Union as a set of knowledge, skills and habits needed to turn ideas into action. As Morselli observes, the entrepreneurial competence represents "a mindset that can help the students and future citizens to be entrepreneurial throughout their life in the different activities they will undertake: in the family, in the workplace, or in their

social life". The spirit of initiative, a proactive attitude, creative thinking, entrepreneurial capability and the ability to manage risks constitute the kernel of these strategic intangible competences activating the agency needed to master problems beyond the technical competencies from a lifelong learning perspective. As Morselli writes: "The competence of the sense of initiative and entrepreneurship is primarily about agency. [...] [E]specially at an employability level, [it] was reported as related to being autonomous, as well as cooperating with others. There is no doubt that this competence is mostly mobilized in the workplace; however the participants said that it can also be put into practice in every context of daily life and hence in a lifelong learning perspective."

In the interesting research carried out by Morselli between Italy and Australia, it seems that, although the two contexts differ significantly, the Change Laboratory, a promising type of workshop bringing about social change and innovation, enabled the students the chance to learn from work experience. The Change Laboratory helped the students enhance their ability to interpret information, starting from discussion with the stakeholders, when confronted with relevant problems. Morselli highlights this by stating that "Students also need to be provided with participatory spaces where they can discuss and reflect on the issues important for them, so that they can make informed decisions. In addition to creating new opportunities, this process also expands the students' positive freedom, autonomy and personal initiative."

The model put forward by Morselli in this book displays how the enhancement of the *learning curriculum* arrived at through *workbased learning* is related to the capacity to involve students to discuss and reflect on the learning relationships between being actively involved in the workplace and studying in class. This model encourages students to become "critical anthropologists" of the practice they take part in, both in the workplace as apprentices and in school as students.

The experimental evidence of Morselli's research shows that an experience in the work environment is formative if, together with the acquisition of technical competencies, the student is given responsibility and realizes him- or herself according to a capability approach: this requires a new modality to design work-based learning models, which should be centred on participative dialectics with work tutors and school teachers. As highlighted by Morselli, the value of experience comes from the creation of "collective spaces where students, their teachers and mentors can work together at the boundary and reflect on how to bridge school and work, and improve the quality of the training delivered". The Change Laboratory workshops in Australia and Italy

were felt by the students and all the participants involved to be places of active participation instead of – as often happens – being worthless and unconnected with the students' objectives. It is thus important to value the relationship between the teaching staff and the work tutors, ensuring not only adequate training, but also their generative interaction with the students – that is, an interaction generating new ideas, concepts and courses of action.

Overall, Morselli's contribution indicates a new path for educational policies according to a capability approach centred on the role of the student and his or her participative, critical and reflective abilities. From this point of view, training for the entrepreneurial competence enhances one's levels of social awareness, participation and responsibility, thus enhancing one's personal and professional life projects.

Massimiliano Costa
Ca' Foscari University of Venice

Introduction

Homo faber fortunae suae.

Appius Claudius Caecus

The words attributed to Appius Claudius Caecus enjoy a widespread and unique popularity, and are often used to express the idea that humankind is the manufacturer of its own destiny. Nowadays, modern education systems are confronting the issue of how to teach students to turn ideas into actions. This requires autonomy, creativity, initiative and the capacity to seize opportunities. This is called entrepreneurship education, and it is the type of education necessary for a citizen living in the era of globalization to be the manufacturer of his or her own destiny. *Homo faber* is also useful as it evokes the image of the craftsperson (*faber* literally means blacksmith). In this regard, the modern institution preparing craftspeople for working life is vocational education and training (VET). Hence, *homo faber* characterizes the very subject of this research: enterprise education in vocational education.

This comparative project has been written for the international reader interested in modern vocational systems, such as the Australian and the Italian systems. Entrepreneurship education and vocational education are considered key elements in combating youth unemployment and helping students face and thrive on the challenges of globalization. Other challenges they will be faced with include climate change and the consequent need for green technologies and economies. At the same time, when turning these challenges into opportunities, young people will have to create value and empower their communities. It is for this reason that improving vocational students' capabilities was another aim of this research.

Here it is argued that the 7th European key competence of the sense of initiative and entrepreneurship can be examined through a

sociocultural laboratory of social change called the Change Laboratory. Vocational students are seen as boundary crossers, as in their vocational courses they often cross the boundaries between school and work. The boundary is characterized by tensions (and thus problems) due to different sociocultural environments encountering diverse objectives, rules, divisions of labour, communities, tools and outcomes. These tensions can also be considered a resource, and thus a learning opportunity for students to show a sense of initiative and entrepreneurship. In this study, the challenges students are facing are discussed within the Change Laboratory workshops, together with teachers and work tutors (representatives of the two interacting activity systems), in a joint effort to redesign the activity systems of school and work and the relationship between them.

Results from the two very different vocational contexts in Australia and Italy permitted a comparison to better understand the elements that encourage a sense of initiative and entrepreneurship in vocational education.

This study is divided into six chapters.

Chapter 1 presents the problem. According to many scholars, since the 1970s the prominent role of knowledge as the driver of innovation and change has determined a dramatic switch from a managed society to an entrepreneurial society, characterized by extremely dynamic small and medium enterprises. In this context, citizens must be equipped with a sense of initiative and entrepreneurship (which is essentially about “turning ideas into action”) in order to master globalization and change from a lifelong learning perspective. Entrepreneurship teaching is essential to improving the quality of vocational education and thus combat youth unemployment, a phenomenon widespread in Europe and elsewhere.

Chapter 2 presents a review of the literature to frame the research project. The main research streams are: the concept of competence and its developments; sociocultural studies on expertise seen as boundary crossing; a critical analysis of the introduction of the competence concept in education; sense of initiative and entrepreneurship as a European key competence for lifelong learning; entrepreneurship teaching in vocational education; and the Change Laboratory within Cultural Historical Activity Theory (CHAT) to bring about expansive learning and social change.

Chapter 3 outlines the methodological framework, and considers the practical details of the research. It is concerned with the timeline for the research in Italy and Australia, including the request for authorizations;

the observant participation; the Change Laboratory workshops; and the follow up. Concerning the follow up, the same chapter will present the questionnaire used to gather data on the educational and socio-economic outcomes of the research. The questionnaire is divided into two parts. The first part is made up of multiple-choice questions on the 7th European key competence on the sense of initiative and entrepreneurship. Following this, to better investigate the meaning attributed by the participants to the experience, the second part of the questionnaire comprises open questions on the 7th European key competence and the Change Laboratory.

Chapter 4 describes the outcomes of each of the Change Laboratory workshops in Italy and Australia. This is preceded by a historical analysis of the context as well as the way in which entrepreneurship education was delivered in the two settings. Consistent with the principles of CHAT, a historical analysis is necessary to better understand the meaning given by the participants to the sense of initiative and entrepreneurship as well as the Change Laboratory workshops.

The following chapters focus on the results and deal with the comparative study and the conclusions. Chapter 5 starts by comparing the quantitative and qualitative answers in the two contexts and then comments on the results. This entails: a comparison and synthesis of the banners made by the students in the light of the Engestrom triangle; considerations on the role of triggering events in entrepreneurship education and learning processes at the boundary; and the answers to the multiple-choice and open questions.

Chapter 6 summarizes the entire study, starting with the issue confronted, youth unemployment and the role of entrepreneurship education and vocational education in a globalized society. It also describes the comparative study and presents the main findings. The chapter then identifies connections between the cultural approaches to entrepreneurship, the Change Laboratory and the capabilities approach. Next the chapter identifies the common Zone of Proximal Development of vocational education and the sense of initiative and entrepreneurship. Two proposals for future research are put forward. Suggestions are given on how to improve the Australian and Italian VET systems.

This work has been supervised by two people: Massimiliano Costa, research fellow at the Ca' Foscari University, and John Polesel, Professor at the Melbourne Graduate School for Education. Massimiliano and John's suggestions have been complementary. Massimiliano assisted this project and contributed very much to improving its content with his

useful advice. His knowledge of educational processes within the industry and of competence has been extraordinarily important to grounding this work on a solid basis. John's suggestions have been essential as well. John has helped in planning the research and establishing the structure of the work. His knowledge of vocational education and comparative educational policies has been invaluable. Special thanks goes to the two reviewers: Yrjo Engestrom of the University of Helsinki and Giuditta Alessandrini of the University Roma Tre.