



Vaasan yliopisto  
UNIVERSITY OF VAASA

MINNA-MAARIT JASKARI

# Teaching the Future Marketers Through Experiential Client- Based Projects

Marketing Knowledge and Skills in the Context of  
Early Phases of Service and Product Development

ACTA WASAENSIA 290  
BUSINESS ADMINISTRATION 117  
MARKETING

Reviewers

Professor Ed Petkus  
Anisfield School of Business  
Ramapo College of New Jersey  
505 Ramapo Valley Road  
Mahwah, NJ 07430 USA

Docent Anne Rindell  
Hanken School of Economics  
P.O. Box 479  
FI-00101 Helsinki

<b>Julkaisija</b> Vaasan yliopisto	<b>Julkaisupäivämäärä</b> Marraskuu 2013	
<b>Tekijä(t)</b> Minna-Maarit Jaskari	<b>Julkaisun tyyppi</b> Artikkelikokoelma	
	<b>Julkaisusarjan nimi, osan numero</b> Acta Wasaensia, 290	
<b>Yhteystiedot</b> Vaasan yliopisto Markkinoinnin yksikkö PL 700 65101 VAASA	<b>ISBN</b> 978-952-476-490-2 (nid.) 978-952-476-491-9 (pdf)	
	<b>ISSN</b> 0355-2667 (Acta Wasaensia 290, painettu) 2323-9123 (Acta Wasaensia 290, verkkojulkaisu) 1235-7871 (Acta Wasaensia. Liiketaloustiede 117, painettu) 2323-9735 (Acta Wasaensia. Liiketaloustiede 117, verkkojulkaisu)	
	<b>Sivumäärä</b> 202	<b>Kieli</b> englanti
	<b>Julkaisun nimike</b> Tulevaisuuden markkinoijien opettaminen kokemuksellisten työelämälähtöisten projektien avulla – Markkinoinnin tiedon ja taitojen vahvistaminen uusien tuotteiden ja palveluiden kehittämiskontekstissa	
<b>Tiivistelmä</b> Tämä toimintatutkimus kohdistuu tulevaisuuden markkinointiekonomian tietojen ja taitojen kehittämiseen. Tutkimuksen tarkoituksena on lisätä ymmärrystä niistä haasteista, joita liittyy työelämälähtöiseen opettamiseen erityisesti epävarmassa, luovuutta ja innovatiivisuutta korostavassa <i>Fuzzy Front End</i> -kontekstissa. Tutkimuksessa kehitetään kokonaisvaltainen kokemukselliseen oppimiseen ja työelämälähtöiseen opetukseen perustuva malli, joka nostaa esille opetuksen ajallisen rakentumisen sekä kriittiset vaiheet. Tutkimuksessa tunnistetaan tiimien rakentaminen, maisterivaiheen haastetason määrittäminen sekä erilaisten ohjausprosessien välillä tasapainottelu kriittisiksi vaiheiksi opetuksen johtamisessa. Kriittisten vaiheiden sisältämät jännitteet auttavat ymmärtämään projektien lukuisia erilaisia mahdollisuuksia sekä kehittämistoiminnan laajuutta opetuksen kentässä. Ohjausprosessit kriittisen ja luovan ajattelun kehittämiseksi osoittavat ohjauksen moninaisuutta ja haasteellisuutta. Tutkimuksessa analysoidaan opiskelijoiden tyypillisiä projektipolkuja, jotka johtavat joko onnistuneeseen tai epäonnistuneeseen lopputulokseen. Opetuksen kannalta halutun lopputuloksen saavuttamiseksi tutkimuksessa ehdotetaan projektin vaiheistusta markkinoinnin kehittämisprosessin, luovan ongelmanratkaisuprosessin, opiskelijoiden päätöksenteon sekä kokemuksellisen oppimisen suhteen. Tutkimuksen tulokset integroidaan linjakkaan oppimisen malliin. Tutkimuksessa korostetaan opettajan roolia opetuksen johtajana, tasapainottelijana eri tekijöiden suhteen. Tutkimus tuottaa uutta tietoa erityisesti markkinoinnin opetuksen kirjallisuuteen.		
<b>Asiasanat</b> yliopisto, opetus, työelämälähtöisyys, markkinointi, fuzzy front end, kokemuksellinen oppiminen, toimintatutkimus		



<b>Publisher</b> Vaasan yliopisto	<b>Date of publication</b> November 2013	
<b>Author(s)</b> Minna-Maarit Jaskari	<b>Type of publication</b> Selection of articles	
	<b>Name and number of series</b> Acta Wasaensia, 290	
<b>Contact information</b> Minna-Maarit Jaskari University of Vaasa Department of Marketing P.O. Box 700 FI-65101 VAASA	<b>ISBN</b> 978-952-476-490-2 (print) 978-952-476-491-9 (online)	
	<b>ISSN</b> 0355-2667 (Acta Wasaensia 290, print) 2323-9123 (Acta Wasaensia 290, online) 1235-7871 (Acta Wasaensia. Business Administration 117, print) 2323-9735 (Acta Wasaensia. Business Administration 117, online)	
	<b>Number of pages</b> 202	<b>Language</b> English
	<b>Title of publication</b> Teaching the future marketers through experiential client-based projects – Marketing knowledge and skills in the context of early phases of service and product development.	
<b>Abstract</b> <p>This action research study focuses on the development of knowledge and skills of the future marketers. The aim is to increase our understanding of the managerial challenges in teaching marketing knowledge and skills through experiential client-based projects in the context of the fuzzy front end.</p> <p>A comprehensive model of experiential client-based teaching is created. The model sheds light on teaching process and the challenges faced in different phases of it. The study identifies managing team composition, deciding on challenge level and balancing between critical and creative support processes as critical stages for the course management. Tensions within these critical stages illustrate the variety of possible project processes and outcomes.</p> <p>Seven typical project paths that students undergo and critical stages within these paths are identified. A model incorporating a business process, a creative process, student outputs and the experiential learning cycle is created for ensuring the final outcome.</p> <p>The findings are integrated to the framework of constructive alignment in order to produce a contextualized and extended understanding of the challenges in managing experiential client-based teaching. The study contributes mainly to marketing education literature.</p>		
<b>Keywords</b> university, teaching, client-based projects, marketing, fuzzy front end, experiential learning, action research		



*Tell me, and I'll listen,  
Show me, and I'll understand,  
Involve me, and I'll learn.*

- Confucius (551–479 BC)





## ACKNOWLEDGEMENTS

This research process has been a lot of fun! I have enjoyed working in academia and on the interface between students' learning and academic teaching. I love the academic challenges and truly enjoy developing my thinking and deep understanding. And I am not alone. Academic thinking evolves through discussion, both oral and written, and I have had a lot of people around me supporting my development. Thus, the dissertation process has not been a path that I have tumbled alone, but together with many people to whom I owe my gratitude.

I would like to thank my supervisor, *Professor Martti Laaksonen*. You have guided me throughout the research process, challenging my thoughts and emphatically hurried me towards the final goal. You have pushed me to the limit and urged me to develop my research-oriented critical thinking. The discussions have been challenging, but very inspiring. It has been an honor to work with you.

I am grateful to the official pre-examiners of this dissertation, *Professor Ed Petkus* from Anisfield School of Business, Ramapo College of New Jersey, and *Docent Anne Rindell* from Hanken School of Economics. You have given your time and effort and evaluated the outcome of my dissertation project.

I would like to thank *Professor Pirjo Laaksonen*. You have had a major role in my doctoral studies right from the beginning. You have inspired me in many ways, both inside and outside academia. You have taught me that there are several ways to do research and how important it is that everyone finds their own way. We know that both the researcher and the horse have to carry herself by herself.

I would also like to thank *Professors Jorma Larimo, Peter Gabrielsson* and *Harri Luomala*, as well as *Docent Kirsti Lindberg-Repo* for the support and motivation throughout my research process. You have been there to motivate and support me and that has helped to maintain my inspiration on the topic.

I have received financial support from the Foundation for Economic Education. This input has had a major role in reflecting my learning through presenting my findings in several academic conferences. I am grateful for that support.

I am grateful for all the clients and the colleagues from other universities that have participated in Concept Factory in several ways. Thank you for your support and co-operation during my active teaching experimentation. Also, I thank all hundreds and hundreds of students that have given me the opportunity for the concrete experience. Without you this work would lose its meaning.

All my dear friends and colleagues in the Department of Marketing. Your role has been very important to me as you have inspired me and walked with me through the creative research process. You understand the mess in research. You are the ones who are the first to know about both the cognitive and affective outcomes of my experiential learning. *Johanna*, you have experienced with me the inspiration and challenges of the cross-functional client-based project work. *Henna* and *Hanna*, you have been an inspiration for me while turning reflective observations into abstract conceptualizations. *Anu*, *Minnie*, *Karita*, *Ari*, *Päivi*, *Jenniina*, *Johanna H.* and *Katarina*, you have provided me with insightful comments regarding both my fuzzy research thoughts and teaching ideas. *Linda*, *Lotta*, *Petra* and *Elina*, I hope my research process encourages you to enjoy yours as well. You all have listened to my blurred ideas and provided me with constructive feedback. Let's continue that way as we truly are the winning team!

There are also numerous friends and colleagues in other departments, faculties and universities. I would like to specially mention *Tuija Mainela*, *Christelle* and *Erno Tornikoski*, *Titti Henje* and *Niina Koivunen*. However, I thank you all for refreshing ideas and thoughts and for stimulating discussions on expected research outcome and process. *Joel Kunttonen* deserves a warm thank you for helping me with the language issues.

My dear friends from my own study times, *Sirkku Pilvi* and *Susanna Otila* – you made my life as a university student memorable. You also reminded me of my own approach to learning. It gives me perspective when aiming at better teaching. Together we also experienced how much marketing knowledge and skills you can learn outside the university.

Not to mention the great team from the teenage years, *Salla Myllys*, *Katja Rii-pinen* and *Terhi Eteläinen*, together we truly touched all the bases of experiential learning, gaining deep understanding from all aspects of life. Without you my construction of professional and private identity would certainly be different.

My closest relatives, dear sister *Tuija Alapiha*, *Kaija Massingberd* and *Martti Jaskari* – you all have been there to support me and have had faith in me. You have given me the safety net to return to when I have been lost. With you I have gained more perspective to the research process and life as general. I sincerely thank you for that.

My family gets my deepest gratitude for supporting my research process. Your love and support was needed in difficult moments. *Harri*, you have pushed me through business-oriented critical thinking over and over again, dragging me back from my creative unconstrained processes. Together we have also enhanced the

transferability of the findings. But mostly I thank you for being there, with me and for me. Thank you, my love. *Taru* and *Paula*, my dear daughters, it is always nice to come home when you are there. Leaving work behind me after a long day has not been my strength, but a skill that needs to be enhanced in the future. Your love truly reminds me what is most important in life.

Last, I also want to thank all my four-legged friends, who have helped me by taking my mind away from sometimes painful thinking. And as it happens, many of the best ideas have evolved after riding, playing with dogs or cleaning the stables.

*Experience is a hard teacher  
because she gives the test first,  
the lesson afterwards.*

*-Vernon Sanders Law*

Tölby, Halloween 2013

Minna-Maarit Jaskari



## Contents

ACKNOWLEDGEMENTS .....	IX
1 INTRODUCTION .....	1
1.1 Purpose of the study.....	4
1.2 Positioning of the study .....	5
1.3 Structure of the study.....	6
2 BUILDING THE STAGE FOR THE DEVELOPMENT WORK .....	8
2.1 Use of experiential pedagogies in marketing education.....	8
2.1.1 Experiential learning theory.....	9
2.1.1.1 Individual learning styles.....	14
2.1.1.2 Approaches to learning.....	15
2.1.2 Client-based projects as real life contexts.....	17
2.2 Essential capabilities of future marketers .....	18
2.2.1 Marketing knowledge .....	18
2.2.2 Generic and marketing specific skills .....	20
2.2.2.1 Problem-solving skills .....	26
2.2.2.2 Teamwork skills .....	27
2.2.2.3 Creativity and innovativeness.....	29
2.2.2.4 Communication and presentation skills.....	33
2.2.3 Summary .....	33
2.3 Challenges in aligning client-based teaching of fuzzy front end.....	34
2.3.1 Setting the intended learning outcomes .....	34
2.3.2 Teaching and learning activities .....	35
2.3.3 Assessing learning outcomes .....	36
3 METHODOLOGICAL CHOICES AND RESEARCH DESIGN.....	37
3.1 Action research as a methodology to develop higher marketing education.....	37
3.2 Building a research design.....	41
3.2.1 Philosophical position of the teacher- researcher .....	42
3.2.2 Course context description.....	42
3.2.3 The cycles of action – reflection .....	45
3.2.4 Data gathering and analysis .....	48
4 SUMMARY OF THE ESSAYS .....	51
4.1 A Holistic Model for Learning Enhancement in the Context of Higher Marketing Education .....	51
4.2 Using pictorial collages in user-centred construction of a creative and effective learning environment .....	52
4.3 Teaching the fuzzy front end of innovation: real life application with cross-functional and international teams .....	54
4.4 Making sense of marketing students' professional identity construction through a multidisciplinary project course.....	55

4.5	The challenge of assessing creative problem solving in client-based marketing development projects: A SOLO taxonomy approach. ....	56
5	MANAGING TEACHING IN CLIENT-BASED MARKETING DEVELOPMENT PROJECTS.....	58
5.1	A model for a holistic client-based teaching process .....	58
5.1.1.	Preparing the challenge .....	60
5.1.1.1	Preparing the teams .....	60
5.1.1.2	Preparing the context.....	62
5.1.2	Building up the challenge .....	64
5.1.3	Supporting the learning process .....	66
5.1.3.1	Facilitating the creative process .....	67
5.1.3.2	Coaching the business-oriented critical thinking process.....	68
5.1.3.3	Enhancing the learning environment.....	68
5.1.4	Assessing the learning outcomes .....	70
5.2	Managing the critical tensions in course management.....	74
5.3	Managing a variety of project paths .....	76
5.4	Managing experiential learning through the contextualized model of constructive alignment .....	81
6	CONCLUSIONS .....	84
6.1	Summary of the study.....	84
6.2	Trustworthiness of the research.....	85
6.3	Contribution of the study.....	87
6.3.1	Theoretical contribution .....	87
6.3.2	Implications for teachers and educational organizations....	88
6.4	Limitations and future research directions .....	89
	REFERENCES .....	91
	APPENDICES .....	106
	Description of Concept Factory courses 2007–2012.....	106
	Evaluation of six final concepts from autumn 2012.....	117
	Final evaluation questions for the students in autumn 2012.....	121
	Client feedback questions 2010–2012 .....	123
	Examples of the collages .....	124

## Figures

<b>Figure 1.</b>	Positioning and focus of the study.....	5
<b>Figure 2.</b>	Structure of the study.....	7
<b>Figure 3.</b>	Experiential learning cycle and personal learning styles (Kolb 1984).....	11
<b>Figure 4.</b>	An example of a cycle of action and reflection illustrating the process of the action research.....	46
<b>Figure 5.</b>	A holistic teaching process for client-based marketing development projects. ....	59
<b>Figure 6.</b>	Critical tensions in course management.....	74
<b>Figure 7.</b>	Phasing the project based on business and creative processes.....	80
<b>Figure 8.</b>	Managing client-based marketing development projects.....	82

## Tables

<b>Table 1.</b>	Empirical studies on marketing (and business) capabilities. ....	21
<b>Table 2.</b>	Summary of the pilot courses.....	44
<b>Table 3.</b>	Essays on different phases of the action research project.....	47





## Essays

- [I] Jaskari, Minna-Maarit (2008/2013). *A Holistic Model for Learning Enhancement in the Context of Higher Marketing Education*. A non-published essay based on two earlier conference papers. .... 127
- [II] Jaskari, Minna-Maarit (2013) Using pictorial collages in user-centred construction of a creative and effective learning environment. *Asia-Pacific Advances in Consumer Research* 10:1, 284–292. .... 143  
*Reprinted with a kind permission of Association for Consumer Research.*
- [III] Jaskari, Minna-Maarit (2012). Teaching the fuzzy front end of innovation: real life application with cross-functional and international teams. *Proceedings of the Annual Conference of the Academy of Marketing Science 2012*. .... 153  
*Reprinted with a kind permission of The Academy of Marketing Science.*
- [IV] Jaskari, Minna-Maarit (2011). Making sense of marketing students' professional identity construction through a multidisciplinary project course. *Proceedings of the 16th Annual Conference of Education, Learning, Styles, Individual Differences Network in 2011*. .... 163
- [V] Jaskari, Minna-Maarit (2013). The challenge of assessing creative problem solving in client-based marketing development projects: A SOLO taxonomy approach. *Journal of Marketing Education* 35:3, 231–244. .... 171  
*Reprinted with a kind permission of Sage Publications Ltd.*



# 1 INTRODUCTION

The contemporary business environment is characterized as keenly competitive, global, technology-intense and dynamic (Tanyel, Mitchell & McAlum 1999). The frequent and unpredictable changes in the market and technology create uncertainty, complexity and turbulence in the business environment (Calantone, Garcia & Dröge 2003). Innovation and the free flow of information are seen as the primary drivers of the accelerating pace of change in the global business environment (McKinsey & Company 2006). Especially in new industries such as the Internet software industry, innovations pop up frequently and the pace at which companies reach success, gain market share, and live or die is head-spinning. Companies gain a competitive advantage through reading and responding to signals faster than their competitors, by adapting quickly to change or by gaining the technological leadership (Reeves, Love & Tillmanns 2012). Indeed, the major challenge for business leaders is to work in this environment of constant turbulence, mounting complexity and rapid change (Kotter 2012).

It is evident that all of this also affects marketing professionals. Indeed, already in 1990, Woodruff and Cravens identified global perspective, competitive advantage through value creation, team orientation, social responsibility and organizational flexibility as critical changes for marketing professionals. Also, the technological changes in the 1990s such as the Internet and more recently the rise of social media have led to fundamental changes in marketing practice (Moon 1999). Goldsmith (2004) identifies globalization, technology, personalization and integration as the main driving forces influencing marketing. These driving forces have affected not only all aspects of marketing management – from gaining customer insight to product development and pricing, from distribution to several aspects of communication – but also marketing research and marketing theory. It is still the role of marketing to build a bridge between the customers and the business, but much of this activity is happening at an unprecedented pace. Indeed, marketing in the 21st century is characterized by ingenuity, creativity, and innovativeness (McCole 2004).

The abovementioned forces build up a picture of the marketing profession as a complex field in which future practitioners will require a varied set of knowledge and skills (Finch et al. 2013). Edgar Schein proposes that professional knowledge consists of (a) basic knowledge of an underlying discipline such as marketing from which the practice is developed, (b) an applied science component from which the problem-solving solutions are derived and (c) a skills and attitudinal component that concerns actual performance in using the underlying basic and applied knowledge in a specific context (Schön 1983: 24). The specific contexts –

the different situations of professional practice – are characterized by complexity, uncertainty, instability, uniqueness and emerging value conflicts (Schön 1983: 14).

The Finnish Association for Business Graduates (SEFE) emphasizes both general and specific business competence in business education. Business competence is defined as a general ability to create, study and develop business. It includes knowledge and skills from a specific topic area such as marketing, critical and analytical thinking skills, creativity and innovativeness, and base competencies including communication, managing the self, managing people and tasks, and mobilizing innovation and change (Saarikoski 2004).

Marketing education has a responsibility to prepare students for their future career success with relevant knowledge and skills (Dacko 2006; Goldsmith 2004). However, there are worries about whether marketing education produces students with the kinds of knowledge and skills that are wanted by their future employers (Middleton & Long 1990; Evans, Nancarrow, Tapp & Stone 2002; Aistrich, Saghafi & Sciglimpaglia 2006; Gray, Ottesen, Bell, Chapman & Whiten 2007; Lincoln 2010). Some researchers even argue that marketing career-focused graduates are underprepared in the area of skills and overprepared in the area of knowledge (Davis, Misra & van Auken 2002). Indeed, teaching at universities is still often claimed to be too theoretical and scientific (Bennis & O'Toole 2005) and thus there is a need to teach the important “how to” skills (Cunningham 1999) that are essential for working with complex, unquantifiable and messy issues that are the everyday bread and butter of contemporary business (Bennis & O'Toole 2005). It seems that there is clearly a need to review the practices of marketing education in order to maximize the learning and future success of marketing graduates (Dacko 2006).

The growing complexity and intellectual demands of business as well as the growing importance of technology and globalization require balancing between knowledge and skills in marketing education (Davis et al. 2002). Marketing as a professional ability requires adaptability to the complex business environment, creativity and innovativeness and business sense. Indeed, the contextual demands for marketing form a challenging arena for marketing education. The focus is not only on understanding the basic concepts or applying them in the textbook manner, but also on understanding the challenges, contradictions and relativeness of each concept. Complex arenas such as fast-changing industries or the uncertain fuzzy front end of product development imply that there are no correct answers, only better or worse solutions.

The matters described above make me think about how we should educate our marketing students to work in these complex and uncertain arenas. How can we enhance their professional knowledge and deep learning? How should we motivate them to make an effort and to create innovative solutions for complex problems? How can we teach marketing graduates to gain the knowledge, skills and attitude required by their future employers and the future business environment?

I am not the only one with these thoughts. Even though Vironmäki (2007) is the only earlier attempt to study academic marketing in Finland, there is extensive international literature on higher marketing education. These earlier studies have focused, for example, on the marketing curriculum and its improvement (Schibrowsky, Peltier & Boyt 2002; Davis, Misra & van Auken 2002; Evans, Nancarrow, Tapp & Stone 2002; Clarke & Gray 2006; Finch, Nadeau & O'Reilly 2013), multidisciplinary challenges (Darian & Coopersmith 2001; Athaide & Desai 2005; Brunel & Hibbard 2006; McCabe & Grant 2007; Wiese & Sherman 2010), experiential pedagogies (e.g., Petkus 2000; Gremler, Hoffmann, Keaveney & Wright 2000; Young 2002; Li, Greenberg & Nicholls 2007), client-based projects (Lopez & Lee 2005; Strauss 2011), innovative teaching methods (Taylor 2003; Ng 2006; Marshall & Pearson 2007; Love, Stone & Wilton 2011), use of technology (Smart, Kelley & Conant 1999; Buzzard, Crittenden, Crittenden & McCarty 2011; McCabe & Meuter 2011; McCorkle & McCorkle 2012), development of specific skills such as self-marketing skills (McCorkle, Alexander, Reardon & Kling 2003), metacognition (Ramocki 2007a,b), creativity (Titus 2000, 2007), teamwork skills (McCorkle, Reardon, Alexander, Kling, Harris & Iyer 1999; Deeter-Schmelz, Kennedy & Ramsey 2002; Freeman & Greenacre 2011), and communication skills (Young & Murphy 2003), as well as critical perspectives on the contemporary development of marketing education (Holbrook 2005).

However, there have been no attempts to develop a holistic model for teaching marketing knowledge and skills in client-based marketing development projects. Furthermore, the innovative context of product development and especially the fuzzy front end have not been studied in depth within the marketing education literature, although there are some attempts such as Martinsuo (2009) and Love, Stone and Wilton (2011). However, the importance of new product and service development is recognized as vital for success in the marketplace (Cooper 1996; Herstatt & Verworn 2001) and special attention is needed in the early and uncertain phases prior to more systematic product development processes, e.g., the fuzzy front end (Murphy & Kumar 1996; Kim & Wilemon 2002). This study fills this gap by combining the knowledge and skills needed in the early phases of product and service development into client-based teaching.

## 1.1 Purpose of the study

The aim of this study is to *increase our understanding on the managerial challenges in teaching marketing knowledge and skills through experiential client-based projects in the context of the early and uncertain phases of service and product development.*

The first objective is to construct a model of holistic teaching process that incorporates constructive alignment and experiential learning to challenges in developing marketing knowledge and skills in client-based development projects. This model integrates different aspects that the teacher needs to consider when managing client-based marketing development project courses

The second objective is to identify critical stages and tensions within that model. These tensions highlight the managerial challenges and decision-making points. Also they illustrate the large scope of possible projects.

The third objective is to analyze typical project paths that lead to successful or unsuccessful project outputs. Further critical stages within students' processes are identified in order to suggest how to overcome the challenges and thus manage the variety of processes involved in client-based project work.

The study is based on action research that was conducted during 2007–2013. The study has occurred in several phases, partly in chronological order and partly in overlapping phases. The purpose and objectives described above include the overall purpose for the action research period. However, during the action research process, different angles to the overall aim have been discovered. These angles, more focused research questions, have been reported in essays. These essays focus on:

1. How to enhance deep learning in higher marketing education? – A managerial perspective. The first study develops a holistic model for learning enhancement. It combines experiential learning, constructive coaching and multiple learning environments. The model serves as an *A priori* model for the development work.
2. How to construct a creative and effective learning environment for business students? The learning environment is seen as an important facet of the learning process. This second study uses student insight and focuses on constructing a learning environment that enhances deep experiential learning.
3. What are the challenges in supporting experiential learning in an international and multidisciplinary course context? The third study adopts not only a cross-

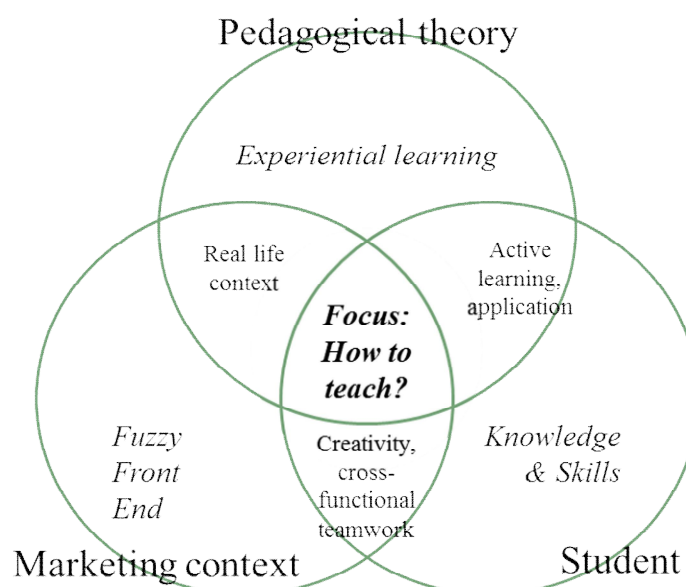
functional but also a cross-cultural focus and reflects on experiences in teaching client-based projects in this context.

4. How to enhance marketing students' professional identity construction through a multidisciplinary project course? The fourth study focuses on students' future professional identity. Based on an analysis of student learning diaries it shows how the students make sense of the construction of their professional identity during the cross-functional learning experience. The study proposes different ways to enhance the construction process.

5. How to assess creative problem solving in client-based marketing development projects? The final study focuses on assessing learning outcomes. It analyzes the use of SOLO taxonomy and develops an assessment framework that combines the assessment of output and process in five different levels of understanding.

## 1.2 Positioning of the study

The context of this study is higher marketing education, specifically the master's level in the European two-level university system. The study combines three theoretical perspectives, namely the pedagogical perspective, marketing context perspective and individual student perspective. The study focuses on understanding how to manage teaching in such a context. This is illustrated in Figure 1. The study contributes to the marketing education literature.



**Figure 1.** Positioning and focus of the study.

Within the area of different pedagogical theories, this study focuses on experiential learning. This theoretical orientation emphasizes the learner's subjective experiences and creation of knowledge (Kolb 1984). There are similarities to problem-based (Boud & Feletti 1999) and inquiry-based learning (Hakkarainen, Lonka, Lipponen 1999), as the student is seen as an active learner who learns through different activities and transformation of experience.

Within the context of marketing, the study concentrates on product and service development and more specifically on the uncertain and early phase prior to systematic processes, i.e., the fuzzy front end. Characteristically, this phase relies on user-centered knowledge and includes opportunity identification and analysis, idea generation, evaluation and selection, concept definition and development, and strategic business planning (Jaskari 2012). In the sense of experiential learning, the context requires real-life situations, where students need to create something new. To enhance the business orientation, this study uses client-based projects as real-life situations.

The individual student perspective concentrates on the development of marketing knowledge and skills. Marketing knowledge is declarative (know what) knowledge and is distinguished from procedural (know how) knowledge, that is marketing skills (Rossiter 2001). A skill is an underlying ability than can be refined through practice (Shipp et al. 1993). The main skills to be developed in the context of service and product innovation are problem solving, creativity and innovativeness, cross-functional teamwork and communication skills. In the sense of experiential learning, this requires active learning and practical application of those skills.

The teaching orientation in this study is constructive. This constructive view emphasizes that learners construct knowledge with their own activities, building on what they already know. The teacher is seen as engaging learners to active learning, guiding the learning processes, and thus enhancing the possibility for learning. (Biggs & Tang 2007: 21.) The experiential learning theory emphasizes students' individual experience and its relation to deep learning (Kolb 1984). Even though the teacher has an active role in all phases of teaching, the students are considered to be responsible for their own learning (Dacko 2006).

### 1.3 Structure of the study

The written research report is structured as presented in Figure 2. This first chapter has introduced the topic and pointed out the research and development gap. In



chapter two I set the stage for the development work. I first discuss the use of experiential learning as background pedagogy in higher education and then discuss the earlier research on essential capabilities of future marketers. I define problem solving, teamwork, creativity and communication as key skills to be developed in the context of early phases of service and product development. I use a framework of constructive alignment to pinpoint the challenges for marketing education.

In chapter three I motivate action research as a methodology to develop client-based marketing education and present a creative problem-solving course that has served as a pilot case during the action research period. Chapter four presents summaries of essays written during the action research period, each of which sheds light on a different angle of the development work.

As an outcome of the research process, in chapter five I address the three empirical objectives. I first model the holistic teaching concept for client based teaching in the context of the early phases of service and product development. I then identify the complementary and competing challenges, the critical tensions within the different phases of teaching. Then, I analyze the typical project paths and suggest ways to manage the variety of projects. Finally, I use these concepts to contextualize the framework of constructive alignment to the marketing context.

Finally, in chapter six I conclude by summarizing the study, discussing its trustworthiness, specifying the theoretical and practical contribution and discussing the limitations and ideas for future research.

The appendices include a description of pilot courses, an example of evaluation framework and student and client feedback questionnaires, and the published essays.



**Figure 2.** Structure of the study.

## 2 BUILDING THE STAGE FOR THE DEVELOPMENT WORK

The first essay of this study builds an *A priori* model that represents a holistic model for learning enhancement in the context of higher marketing education. It combines experiential learning, constructive coaching and learning environment in a model that enhances both students' deep learning and ability to produce creative solutions in client based marketing projects. The first framework serves as a starting point for the action research project. It is still wide and open for possible solutions, but sets the focus for the development work. The model is more a parsimonious than specific representation of the learning enhancement in higher marketing education. Indeed, it does not focus yet into the fuzzy front end, but emphasizes the creative solutions on client based projects in general.

In this chapter I move on from that essay, I discuss more deeply the use of experiential pedagogies in marketing education, review the earlier literature of the capabilities needed from the future marketers and based on these define challenges that client-based marketing education faces in a light of constructive alignment (Biggs 1996).

### 2.1 Use of experiential pedagogies in marketing education

Ardley and Taylor (2010) strongly argue for the use of experiential-based learning methods for marketing education. They suggest that marketing curriculums should use those more in order to not only transmit the marketing knowledge, but also skills that help the students to become marketing practitioners. Also Cunningham (1999) encourages teaching by learning by doing pedagogies rather than by traditional lecturing and transmission of abstract, technical knowledge.

The *Journal of Marketing Education*, *Marketing Education Review* and *Journal of Education in Business* report plenty of practical examples of how to involve students into experiential learning activities. It is described how experiential pedagogies has been used, reported and supported in marketing contexts. For example, Young (2002) report the application in teaching principals of marketing, Wooldridge (2006) used the method more specifically in teaching product and branding within the principles of marketing, Gremler, Hoffman, Keaveney and Wright (2000) in services marketing, Helms, Mayo and Baxter (2003) in trade show events while teaching international marketing, Hunt and Laverie (2004) in combining experiential learning and the Hunt-Vittel theory of ethics in teaching

marketing ethics, Ardley and Taylor (2010) in consultancy projects, Li, Greenberg and Nicholls (2007) created an innovative simulation course using experiential pedagogy, and Petkus (2000) utilized experiential pedagogy in different service-learning projects.

It is evident that experiential pedagogies have been seen powerful for business and marketing where broad concepts, principles and analytics must be understood thoroughly (Young 2002). It seems that the practical, down to earth – nature of marketing has plenty of possibilities for experiential learning. However, as Kolb and Kolb (2005) note, experiential learning is often misunderstood as a set of tools and techniques to provide learners with experiences from which they can learn or just a mindless recording of experience. However, the experiential learning theory developed by Kolb (1984) is a philosophy of education and its foundation lies in the works of Kurt Lewin from social psychology, John Dewey from educational psychology and Jean Piaget from developmental psychology (Petkus 2000).

### 2.1.1 *Experiential learning theory*

Experiential learning theory sees learning as a process whereby knowledge is created through the transformation of experience. Learning results from the interplay between affect, cognition, perception and behavior. (Kolb 1984: 21, 38) It emphasizes active, student-centered learning (Hunt & Laverie 2004). Learning includes not only the substance of what was supposed to learn, but also meta-skills such as learning skills, problem solving skills and analyzing skills (Hakkarainen, Lonka & Lipponen 1999).

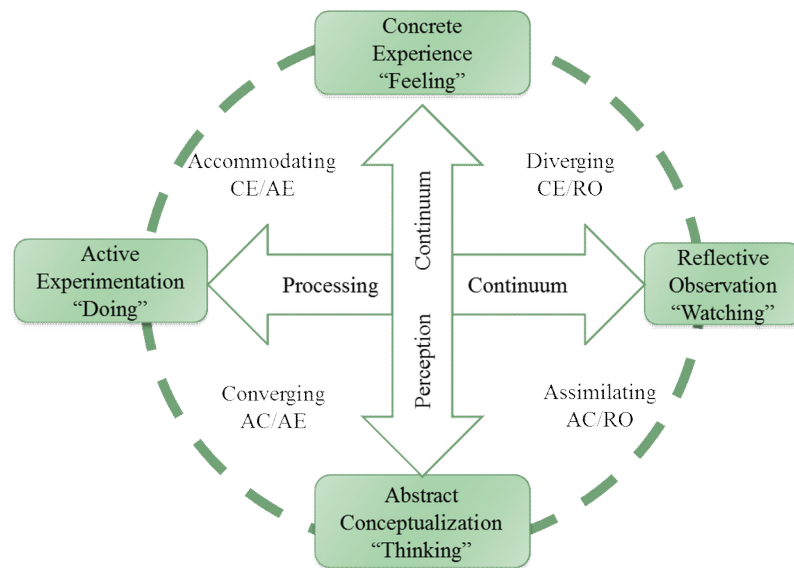
The theory of experiential learning is built on six basic propositions. First, *learning is seen to be best conceived as a process, not in terms of outcomes*. Thus to improve learning in higher education the primary focus should be on engaging students in a process that best enhances their learning, a process that includes feedback on the effectiveness of their learning efforts. (Kolb & Kolb 2005) This assumption supports the idea of working within projects and cases where learning can be supported throughout the project. Second, *all learning is seen as relearning*. Students' previous beliefs, ideas and knowledge about the topic structure and guide the new learning. Thus in order to enhance learning, the new knowledge should be connected to old beliefs. (Kolb & Kolb 2005) The beliefs are subjective and thus the previous knowledge and beliefs differ from student to student. The challenge is to understand students' way of thinking, to uncover previous knowledge on which the new learning is connected.

Third, *learning requires the experience and resolution of conflicts*. Contradictions, differences, conflict and disagreement are what drive the learning process. In the process of learning one is called upon to move back and forth between opposing modes of reflection, action, feeling and thinking. (Kolb & Kolb 2005) As from the teacher's point of view the challenge is how to build up tension in projects. Fourth, *learning is seen as a holistic process of adaptation to the world*. This means that learning involves the integrated functioning of the total person – thinking, feeling, perceiving and behaving. (Kolb & Kolb 2005) According to this, learning process should be considered to be holistic so that the student can “put herself into it”, to experience the learning from different perspectives.

Fifth, *learning results from interaction between the person and the environment*. Learning occurs through equilibration of the dialectic processes of assimilating new experiences into existing concepts and accommodating existing concepts to new experience (Kolb & Kolb 2005). Learning occurs also in interaction between the teacher and other students, when different concepts and problems are discussed and solved. Sixth, *learning is the process of creating knowledge*. Experiential learning proposes a constructivist theory of learning where social knowledge is created and recreated in the personal knowledge of the learner. (Kolb & Kolb 2005.) Thus the teacher's role is not to transfer knowledge but engage students in knowledge creation activities.

According to the experiential learning theory, the most effective learning requires four learning modes: concrete experience (CE), active experimentation (AE), reflective observation (RO) and abstract conceptualization (AC). The experiential learning cycle, two opposing continuums and different learning styles are presented in Figure 3.

In order to engage into the learning process, a learner needs to be able to involve themselves openly to new experiences (Kolb 1984: 30). *Concrete experience* involves sensory and emotional experience in some activity (Petkus 2000). It provides the basis for the learning process and should be designed to engage, motivate and evoke affective aspects of experience. Such techniques involve cases, simulations, videos or current news article. The personally relevant experience engage student in the learning process and helps the student to bridge the perceived gap between the academic learning and real life (Young 2002). The personal experience is the focal point for learning as it gives life, texture and subjective personal meaning to abstract concepts (Kolb 1984: 21).



**Figure 3.** Experiential learning cycle and personal learning styles (Kolb 1984).

A learner needs an ability to reflect on and observe their experiences from variety of perspectives (Kolb 1984: 30). This *reflective observation* involves watching, listening, recording, discussing and elaborating on the experience. This phase involves making connections across experiences without necessarily integrating theories and concepts (Petkus 2000). Reflective observation creates meaning from concrete experiences and active experimentation. “*Reflection and elaboration form different perspectives helps the learner to dissect their experiences into aspects that can be integrated with other experiences and used in later phases of learning*” (Young 2000). Hatcher and Bringle (1997) note that reflection is essential for learning as it helps to link the concrete with the abstract. They suggest that teachers can enhance effective reflection activities such as journal writing by linking experience to learning objectives, giving clear guidance for assignments, scheduling reflection activities for the students regularly, allowing feedback and assessment and including clarification of values (Hatcher & Bringle 1997).

*Abstract conceptualization* involves an ability to integrate observations into theories and concepts into the overall learning process (Kolb 1984: 30). This phase involves in-depth thinking (Petkus 2000). Learners can be asked to relate their experiences and experimental outcomes to textbook theories and concepts. Teachers can use model-building, critiques of models and theories and concept mapping to foster abstract conceptualization (Young 2002). For example, the students may look for literature in order to find out, which theories, concepts or models can enhance their understanding of the context. Or, they can build their

own theoretical constructs or propositions and test them later on (Hakkarainen, Lonka & Lipponen 1999).

To complete the learning cycle, the learner needs to use the theories to make decision and solve problems (Kolb 1984: 30). Thus the *active experimentation* is the doing phase, in which the student engages in a trial-and-error process through field-work, case studies or labs (Petkus 2000). Emphasis is in “doing” through the use of theories, models, concepts or processes to create potential outcomes. Active experimentation should move inactive (physically and/or mentally inactive) learners into active and involved learners (Young 2002; Wooldridge 2006).

The model of learning cycle also portrays to dialectical continuums. The concrete experience and abstract conceptualization form a perception continuum which refers to two different modes of grasping experience. It refers to the students’ emotional response, such as preferring to learn through feeling or thinking. The concrete vs. abstract dialect represents two different and opposed processes of taking hold or grasping of experience in the world, it describes, how we think about things. This occurs either through preference to rely on the tangible, concrete qualities (apprehension) or on the conceptual interpretation and symbolic representation (comprehension). The dialect of active experimentation vs. reflective observation forms a processing continuum which refers to two different modes of transforming experience. It describes how we do things and refers to the students’ approach to a task, such as preferring to learn by doing or watching. The first mode in transforming the grasped experience is by actively manipulating external world and the second is by internal reflection. (Kolb 1984: 40–41; Nevgi & Lindholm-Ylänne 2009).

Learning is most effective when a student goes through all the modes, experiencing, reflecting, thinking and acting, thus “touching all the bases” (Eickmann, Kolb & Kolb 2002). Learning becomes in-depth, cumulative, more specific and contextual. This in-depth learning involves a creative tension among the four learning modes that is responsive to contextual demands (Petkus 2000). However, one of the challenges is to make the learning cycle complete. Concrete experience and active experimentation are bases that are easier to reach by students, but result only to hands-on experiences (Young 2000). However, as the given tasks are complex business projects involving innovative problem-solving, also more abstract thinking is required.

Also, already Dewey acknowledged that experience itself may not be educative but may create controversy, and if this controversy is not reflected upon, it can be a misleading, harmful experience (Young 2000; Hatcher & Bringle 1997). If students do not think seriously about their experiences, they experiences may rein-

force stereotypes and incorrect suppositions. In order to complete the learning cycle and provide meaningful conceptual understanding the minds-on phases, reflective observation and abstract conceptualization, need to be explicitly addressed. Most learning is occurring, when some contradictions are faced and then solved (Kolb & Kolb 2005).

From the teaching point of view, the central focus in experiential learning is to support the students' personality, social growth and self-understanding. Reflection and the use of it is vital in this pedagogy (Nevgi & Lindholm-Ylänne 2009). For the students experiential learning is motivating but also challenging. It may increase motivation and provide associative structure of events in memory that helps insure that whatever is learnt is not lost. Experimental learning may in this sense lead to self-assurance, sense of accomplishment and mastery that successful action provides (Denise & Harris 1989). However, it may also lead to opposite if students refuse to engage themselves into the learning process, to involve themselves openly into new experiences, to take the challenge.

Experiential learning theory is naturally not without critique (Beard & Wilson 2006: 38–43). For example Miettinen (2000: 68) argues that the theory does not take into account the power of habits. Reynolds (1997) and Holman, Pavlica and Thorpe (1997) criticize the cognitive groundings of the theory. They argue that the model separates an individual from their social, historical and cultural contexts. Indeed, they emphasize the importance of social interaction for learning and human development.

Further, Kolb (1984) describes learning starting from the concrete, personal experience, but Honey and Mumford (1992) emphasize that student may begin the learning anywhere in the cycle and does not have to start in any particular phase. Indeed, the learning process is seen as iterative and it allows students to join the process at any phase (Beard & Wilson 2006: 33). Holman, Pavlica and Thorpe (1997: 145) go further and argue against the sequential progressing through the learning cycle and consider learning as a process of argumentation and rhetoric in which thinking, reflecting, experiencing and action are different aspects of the same process, happen simultaneously and cannot be separated from each other.

Also, in experiential learning pedagogies the experience and experimentation are often over emphasized and less focus is given to reflective observation and conceptualization (Young 2002). However, the ability to learn and think critically over actions taken is an important skill for marketers (Gray et al. 2007). Thus, marketing education should engage students into critical reflection (Ardley & Taylor 2010). Indeed, more emphasis needs to be put on reflective observation,

conceptualization and therefrom to critical reflection. In this way the students grow in their self-understanding and also construct their professional identities.

#### 2.1.1.1 *Individual learning styles*

The experiential learning theory assumes that people learn in different ways. The learning styles inventory (LSI) developed by Kolb (1984) aims at finding out what is the individual way of resolving dialectics. Thus the starting point is the individual way of processing information (Ackerman & Hu 2011), whether the student wants to watch or do and at the same time think or feel. This determines the individual learning style and it is assessed by ranking preferences for feeling, thinking, acting and reflecting. (Eickmann, Kolb & Kolb 2002; Kolb & Kolb 2005). The different learning styles are named convergent, divergent, assimilative and accommodative learning style (Kolb 1984). Each learning style has different strengths and weaknesses and thus the learning styles can be used also in team formation (Kayes, Kayes & Kolb 2005). Kolb (1984: 77–78) provides descriptions of each learning style:

“The convergent learning style relies primarily on abstract conceptualization and active experimentation (AC/AE – thinking & doing)). The greatest strengths of this learning style lies in problems solving, decision making and the practical application of ideas. In this learning style, knowledge is organized through hypothetical-deductive reasoning. Convergent learners are controlled in their expression of emotion, they prefer to deal with technical tasks and problems rather than social and interpersonal issues. (Kolb 1984: 77)”

“The divergent learning style has the opposite learning strengths from convergence. It emphasized concrete experience and reflective observation (CE/RO – feeling & watching). The greatest strength lies in imaginative ability and awareness of meaning and values. The primary adaptive ability of divergence is to view concrete situations from many perspectives and to organize many relationships into a meaningful “gestalt”. The emphasis is on adaptation by observation rather than action. People oriented towards divergence are interested in people and tend to be imaginative and feeling-oriented. (Kolb 1984: 77–78)”

“The assimilative learning style relies on abstract conceptualization and reflective observation (AC/RO – watching & thinking). The greatest strength of this learning style lies in inductive reasoning and the ability to create theoretical models by assimilating disparate observations into and integrated explanation. As in convergence, assimilative learning style is less focused on people and more concerned with ideas and abstract concepts. Ideas are not judged so much with their practical value, but the theory needs to be logically sound. (Kolb 1984: 78)”



“The accommodative learning style has the opposite strengths from the assimilative learning style. It emphasized concrete experience and active experimentation (CE/AE-doing & feeling). The greatest strength lies in doing things, in carrying out plans and tasks and getting involved in new experiences. The adaptive emphasis of this orientation is on opportunity seeking, risk taking and action. People with this learning style tend to solve problem in an intuitive trial-and-error manner, relying heavily on other people for information rather than their own analytic ability. They are at ease with people but sometimes seen as impatient and “pushy” (Kolb 1984: 78).”

Individual learning styles reflect students’ primary approach to resolve dialectics. However, for example when people grow older they are able to change their learning style depending on the situation or context. Thus, for example, an accommodative learner, who prefers to do things and carry out plans, can set aside and reflect more what others are doing. However, according to Kolb (1984) the primary learning style is constant, only the emphasis on different bases may vary.

There are distinct differences in learning styles between different disciplines. For example, marketing professionals are often accommodative learners whereas engineers tend to be convergent and designers divergent learners (Kolb 1984: 86, 90–91, 130).

The understanding of different learning styles assists teacher on how to construct teaching and learning activities. It can be also used in formation of teams (Kayes, Kayes & Kolb 2005). Also, the understanding of learning style may enhance students’ self-understanding as the students understand why they behave as they do, and what are their strengths and weaknesses (Beard & Wilson 2006: 34). Further, it deepens the understanding of different roles within the team and may help to solve conflicts with team members.

#### *2.1.1.2 Approaches to learning*

The students’ approach to learning refers to students’ motives for learning and strategies of going about learning (Biggs 1979). The approaches to learning have been divided into three distinct categories, namely deep, surface and strategic (Entwistle, Hanley & Hounsell 1979; Entwistle 2001). Each of the three approaches is related to distinctive form of motivation: intrinsic for deep approach, extrinsic and fear of failure to surface approach and a need for achievement for strategic approach (Entwistle 2001).

The deep approach refers to an active engagement with the content, leading to extensive elaboration of the learning material, while seeking personal understanding. The intension is to understand ideas for oneself. The student may aim to re-

late ideas to previous knowledge and experience, to look for patterns and underlying principles, to check evidence and relate it to conclusions, to examine logic and argument critically and to become actively interested in the course content. (Entwistle 2001).

Whereas the deep approach refers to activities that are appropriate to handling the task so that an appropriate outcome is achieved, the surface approach refers to activities of an inappropriately low cognitive level, which yields fragmented outcomes (Biggs 1999b). The surface approach indicates the routine memorization to reproduce those aspects that are expected to be assessed. The intention is to cope with course requirements. The student aims at studying without reflecting on purpose, treating the course material unrelated bits of knowledge, they memorize facts and procedures routinely, they find difficulty in making sense of new ideas presented and feel undue pressure and worry about their work (Entwistle 2001).

The strategic approach combines deep and surface approaches in order to obtain the highest possible grade and relies on organized studying and an awareness of assessment demands (Biggs 1979).

In education, the deep approach should be encouraged. Academic, active students adopt a deep approach to learning in their major subjects often despite the teaching. However, non-academic, passive students are likely to adopt a deep approach only under the most favorable teaching condition. Thus the teaching should aim at getting most students to use the higher cognitive level processes that the more academic students use spontaneously (Biggs 1999b).

Approaches to learning differ between different disciplines. In general, students in the “hard” sciences and applied sciences usually rely on surface approach to learning, whereas students in “soft” humanities and social sciences more often adopt a deep approach to learning (Entwistle & Ramsden 1983; Parpala et al. 2010). Indeed, it is argued that the production of knowledge and the means of communication vary between disciplines and during the university years the students tacitly learn the norms of their disciplinary culture (Parry 1998). Different disciplines have their own categories of thought, which provide concepts of theories, methods, techniques and problems that are shared within the academic field (Ylijoki 2000). Thus, if deep approach to learning is aimed for, the teaching towards it should be started already from the beginning of the university studies.

Students’ approaches to learning are affected by their prior experiences in education and in their personal lives. This produces habitual patterns of studying. However, the content and context of the task may evoke strategies that are specific to a

certain situation (Entwistle 1979). Thus, the teaching needs to focus on the student and what and how they should be learning (Biggs 1996).

### 2.1.2 *Client-based projects as real life contexts*

Client-based projects form a natural real life context for marketing students that bring realism to the class room and enhance active, experiential learning (de los Santos & Jensen 1985; Gremler et al. 2000; Razzouk, Seitz & Rizkallah 2003). The opportunity to apply knowledge and skills to actual needs of a client provides a rich hands-on experience for the students (Ardley & Taylor 2010). This helps the course concepts come to life and enhance students' ownership of the learning process (Lopez & Lee 2005). Client-based projects have been argued to foster problem solving, critical thinking, communication and teamwork –skills (Barr & McNeilly 2002; Kennedy, Lawton & Walker 2001).

The process of client-based projects is often messy as some information is available multiple places, it is difficult to determine what information is valid, reliable and useful for the project, or some important aspect of information is missing. This ambiguity teaches the students to make decisions under uncertainty and helps students to solve complex and unstructured problems (Kennedy, Lawton & Walker 2001). Also the student motivation is argued to heighten as the students acknowledge that their work may be used in the real business context and they can make a difference (Fox 2002; Goodell & Kraft 1991).

Despite the value of client-based projects for the students' learning process, not all teachers want to integrate them to their courses. Indeed, for teachers such courses can be overwhelming (Lopez & Lee 2005), it can be a struggle to find suitable clients, challenging to grade such projects and means a considerable time commitment (Razzouk, Seitz & Rizkallah 2003). Some teachers consider client-based projects to be too big to manage and not worth the trouble (Goodell & Kraft 1991).

Experiential learning theory provides an interesting pedagogical framework for marketing education. Next, I will look more into the marketing context. What are the knowledge and skills that are required from the future marketers? What skills should be developed in the higher marketing education?

## 2.2 Essential capabilities of future marketers

The American Marketing Association defines marketing as “the activity, set of institution, and processes for creating, communication, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (American Marketing Association 2007). The definition of marketing implies that the area of marketing is wide and therefore marketing graduates can be employed into a diverse set of companies, organizations and jobs.

This implies that marketing graduates need to have essential capabilities in order to be able to work on large variety of jobs. One of the most extensive studies on future capabilities of marketing graduates argue that “*marketing graduates need an ability and willingness to learn about product-markets, solve marketing problems, communicate with internal and external stakeholders and be able to work in teams. Also, they require the knowledge of a wide range of marketing subject areas to put these skills into context*” (Gray et al. 2007). Indeed, marketing education needs to balance between the theoretical knowledge and practical skills that are taught. In this chapter I review the earlier literature on marketing knowledge and skills needed from marketing graduates.

### 2.2.1 *Marketing knowledge*

Marketing knowledge is the foundation of our discipline. Marketing knowledge is what marketing teachers, academic and consultants teach and what marketing managers’ use. Marketing knowledge is declarative (know what) knowledge and is distinguished from procedural (know how) knowledge, that is marketing skills (Rossiter 2001). The fundamental forms of marketing knowledge are marketing concepts, structural frameworks, empirical generalizations, strategic principles and research principals (Rossiter 2001, 2002).

*Marketing concepts* are the building blocks of marketing knowledge. Marketing, as any other science has concepts whose definitions are known by discipline. Rossiter (2001) argues that the set of generally approved marketing concepts are those accepted in most marketing textbooks; business strategy concepts, buyer behavior concepts, product and service concepts (including new product development concepts and brand management concepts), pricing concepts, distribution concepts, sales force management concepts, advertising concepts, promotion concepts, and market research concepts. Gray (2007) specifies typical marketing knowledge areas as marketing communications, consumer behavior, product and brand management, strategic marketing, business- to business –marketing, market

research and analysis, direct marketing, services marketing, innovation and new product development, and personal selling and sales management.

The topic level concepts consist of several lower level concepts within and concepts may vary from basic to advanced. Basic concepts are such that are covered in general marketing textbooks (e.g. Kotler & Armstrong (2004) *Principles of Marketing*) whereas more advanced concepts are covered in more specialized marketing textbooks (e.g. Monroe (1991) *Pricing* or Evans, Jamal & Foxall (2006) *Consumer Behavior*). However, there is no general agreement on specific content marketing knowledge (Rossiter 2001), and indeed, the different schools of thought value different concepts and view them on different levels.

*Structural frameworks* are descriptive lists of concepts that help to organize and solve marketing problems. Well-known structural frameworks in marketing are for example 4P for marketing mix or 7P for services marketing. They again, exist in different levels, from basic and more general to advanced and more specialized (Rossiter 2001). Empirical generalizations refer to descriptive statements in “if, then” –form. For example: “if the market situation is X, then Y will happen” (Rossiter 2002; Uncles 2002).

Strategic principles are conditional and normative prescriptions for managerial use. For example: “If the market situation is X, then do Y.” Strategic principles are a dynamic, causal framework form opposed to static structural framework form. Indeed, strategic principles imply a causal relationship between one concept and another. The conditionality of the strategic principle refers to its context-dependency. There are no universal principles of marketing, and indeed, Armstrong and Schultz (1993 in Rossiter 2001) studied nine major marketing textbooks and found only 20 statements that could be qualified as providing meaningful principles. *Research principles* are conditional and prescriptive in nature. Research principles have a basic form of: in situation X, use technique Y (Rossiter 2001, 2002). Indeed, research principle does not apply to the skill of using a particular research technique, rather to understand what technique is suitable or best in a given situation.

Rossiter (2002: 372) regards marketing concepts as having a first-order status as a form of marketing knowledge. Strategic frameworks and empirical generalizations have a second-order status since they combine concepts. Eventually, strategic principles and research principles have a third-order status as a form of marketing knowledge, since they causally combine marketing concepts and therefore are top of hierarchy of usefulness.

### 2.2.2 *Generic and marketing specific skills*

The earlier research has pointed out several skills that are essential for future marketers (Gray et al. 2007; Schlee & Harich 2010). These marketing skills are both generic and specific in nature. General or transferable skills are relevant to any employment situation. Specific or non-transferable skills are specific to a certain discipline or employment situation.

Evers, Rush and Bedrow (1998) have developed a typology of base competencies that each consist of four to five generic skills. The base competencies are managing self, communicating, managing people and tasks and mobilizing innovation and change. Managing self means the ability to constantly develop practices and internalize routines for maximizing one's ability to deal with uncertainty and an ever-changing environment. It consists of skills of learning, personal organization/time management, personal strengths, and problem solving / analytic. Communicating refers to interacting effectively with variety of individuals and groups to facilitate the gathering, integrating, and conveying of information in many forms (e.g., verbal, written). The skills include interpersonal, listening, oral communication and written communication. Managing people and tasks refer to an ability to accomplish the tasks at hand by planning, organizing, coordinating, and controlling both resources and people. The skills include coordinating, decision-making, leadership/influence, managing conflict, planning and organizing. Mobilizing innovation and change refers to an ability to conceptualize, as well as to set in motion, ways of initiating and managing change that involve significant departures from the current mode. The skills include ability to conceptualize, creativity/innovation/change, risk-taking and visioning. (Evers, Rush & Bedrow 1998: 40–41; Bedrow & Evers 2011.)

Marketing specific skills are relevant to marketing employment situations. There are several studies pointing out the different skills needed from future markets as presented in Table 1 which is adopted and continued from Gray et al. (2007). The spectrum of different skill requirement is wide and different authors define them differently. For example Gray et al. (2007) found that the marketing graduates need to master the skills of: willingness to learn, interpersonal skills, problem solving, written communication, teamwork, flexibility and adaptability, oral communication, ability to plan own work, multidisciplinary perspective, and analytical skills. Wellman (2010) listed 52 attributes required from marketing graduates based on job postings, excluding 22 personal traits, and Finch et al. (2013) ended up with 72 items in studying knowledge and skills areas that future marketers need.

There are also skills that the graduates are expected to develop later during their careers, after graduation. These are more strategic skills such as strategic thinking, leadership and management skill. Also they need to demonstrate knowledge of strategic planning, product and brand management, communication and promotion, and consumer behavior (Gray et al. 2007). Also Schlee and Harish point out how requirements change between different levels of marketing jobs (2010). The marketing education needs to not only prepare the students with the skills for an entry-level position, but also prepare them to be able to develop further in more strategic skills in the future.

**Table 1.** Empirical studies on marketing (and business) capabilities.

Authors	Research focus, sample(s), methodology	Context	Knowledge, skills, capabilities, experience and (or attitude assessed)	Findings, conclusions
<b>Benson (1983)</b>	Business graduates Survey of 59 personnel managers in the USA	USA	Oral communication, written communication, technical competence, work experience, enthusiasm	Oral and written communication skills are most important
<b>Dawes &amp; Patterson (1987)</b>	Product management Census of product management job advertisements, interviews with senior Australian managers, survey of 201 Australian managers, Likert	Australia		Product managers typically have four roles: coordination/implementation; short-term analysis/forecasting; long-term/strategic planning and, product development. Formal business qualifications are important
<b>Beamish &amp; Calof (1989)</b>	International business education Senior managers in 122 Canadian organizations, postal survey with telephone follow-up, four-point Likert	Canada	Communication skills, interpersonal skills, management skills, leadership, adaptability/flexibility, ethical/moral standards	Management education is too academic and remote
<b>Deckinger et al. (1989)</b>	Advertising assistants Survey of advertising teachers and recruiters in US. Paired comparisons, five-point Likert	USA	Team player, strategic thinker, leader, well-spoken, ambitious, keeps big picture in mind, quantitative, creative, writes well	Academics accentuate job-specific attributes while recruiters prefer broader, more global view
<b>John &amp; Needel (1989)</b>	Market research assistants Survey of 10 research suppliers, 18 ad agencies, and seven manufactures in USA	USA	Sales, research, written communication, oral communication, computer literacy, analytical skills, interpersonal skills	Most important skills for entry-level market researchers are communication, interpersonal and analytic skills
<b>Kelley &amp; Gaedeke (1990)</b>	Marketing assistants Survey of 114 managers and 500 students in USA, seven-point Likert	USA	Oral communication, written communication, interpersonal skills, problem solving quantitative skills, technical skills, enthusiasm/motivation, initiative, leadership, work experience	Most important criteria for hiring graduates are oral and written communication, interpersonal skills and motivation. About 445 of employers perceived lack of communication skills as the single greatest weaknesses of graduates
<b>Boldy et al. (1993)</b>	European managers Survey in Sweden, Belgium, Germany and Spain	Europe	Decision making, conflict resolution, planning and evaluation, directing, general knowledge, self-confidence, open-mindedness, energy	

<b>Shipp, Lamb &amp; Mokwa (1993)</b>	70 marketing educators listed of skills needed by marketing students, secondary studies	USA	Numerous skills listed as examples: communication, intuition, creativity, computer usage, leadership, problem solving, decision making, time management, negotiation, networking, patience, listening, non-verbal communication, small groups dynamics, risk taking, globalization, critical thinking, etiquette and cross-functional competence.	Teaching tips and examples of on how to develop the skills of communication, intuition, creativity, and computer usage.
<b>Phillips &amp; Zuber-Skerritt (1993)</b>	Postgraduate business and management education Survey of managers and academics in Australia	Australia	Interpersonal skills, creativity, teamwork, communication skills, breadth and depth of knowledge, morality/ethics	Managers emphasize practical management and communication skills, educators focus on theory, research methods
<b>Neelan-kavil (1994)</b>	MBA graduates Survey of 108 human resource managers in USA based on Fortune 1000 companies	USA	Most important skills based on survey (item list n/a Research & technical skills, communication and presentation skills, interpersonal and people skills, knowledge of business, leaderships and initiative skills MBA graduates very well prepared in computer skills, importance of strategic planning and oral communication. Not at all prepared in importance of quality, global challenges and written communication	Communication skills, creativity, negotiation skills, problem identification, teamwork and thinking and thought processes should be included into MBA programs
<b>O'Brien &amp; Deans (1995)</b>	Marketing assistants Survey of 274 students and 22 employers in Scotland	UK	Numerical skills, oral communication, presentation skills, analytical skills, problem-solving skills, leadership	Identified lack of presentation, analytic and oral skills. Too much emphasis on theory, practical skills omitted. Industry wants marketing specialists with all-round business skills.
<b>Lundström &amp; White (1997)</b>	International marketing education Survey of 95 academics and 250 practitioners in USA, five-point Likert	USA	General marketing competence, oral communication, analytic/quantitative, written communication, people skills	Practitioners seek students that are pragmatic and problem-solving oriented. More similarities than differences between academics and practitioners.
<b>Floyd &amp; Gordon (1998)</b>	Marketing assistants Survey of 70 human resource managers, 175 management students and 11 academics in New Zealand. Conjoint analysis	NZ	Communication skills, problem solving, interpersonal skills, work experience	Problem solving is most important, communication also critical. Employers show a significant preference for written communication skills over verbal.
<b>Cun-ninham (1999)</b>	Commentary from practice	Ireland	Need for communication, teamwork, interpersonal skills, report writing and negotiation skills to be improved. Also imagination via creative approach.	There is a need to combine theory and practice to develop the future marketers
<b>Kretovics (1999)</b>	MBA education Pre-and post-test of MBA students in USA	USA	Interpersonal skills, information gathering, analytical skills, behavior	MBA program increases learning skills. No significant change in some important factors
<b>Sneed &amp; Morgan (1999)</b>	Accounting education Accounting aptitude test – verbal, quantitative, problem-solving ability of students in USA	USA	Technical skills, communication skills, problem-solving skills	Students have good technical but poor communication and problem-solving skills. Course integrated these skills but not enough
<b>Tanyel, Mitchell &amp; McAlum (1999)</b>	Human resource managers and business faculty	USA	16 attributes based on earlier research and rated in this one. Responsibility and accountability, ethical values, interpersonal skills, oral communication, time manage-	Responsibility and accountability was rated highest as a skill needed for success. Interpersonal skills were rated as most desirable in recent business school graduates.



			ment and punctuality, ability to work in teams, decision making and analytical ability, written communications, creativity and creative thinking, ability to assimilate new technology, project management, presentation skills, computer problem solving skills, computer word-processing skills, persuasive ability, global awareness.	
<b>Davis et al. (2002)</b>	Marketing assistants Survey assessing skills and knowledge of 298 current and previous USA marketing students	USA	Technical presentation, Analysis, Teamwork, Oral communication, Quantitative skills, Marketing communications, understanding marketing concepts	Skills important for entry level positions, knowledge is more important later in career. Alumni felt under-prepared in terms of technical and written oral communication skills
<b>Duke (2002)</b>	Marketing education Hiring criteria, success factors, benchmarking, depth interviews and focus groups, unforced five-point Likert	USA	Leadership, communication skills, interpersonal skills, analytic skills, decision-making, technology, global economy, ethics, business practices	Interpersonal, communication and leadership are very important skills and should be introduced at earlier level
<b>Stern &amp; Tseng (2002)</b>	Marketing research education Survey of 203 market research practitioners and academics		Looked at broad issues related to marketing research courses, not specific skills	Major gaps exist between how practitioners and academics think market research should be positioned in marketing courses
<b>Taylor (2003)</b>	Marketing assistants Benchmark study of course designed to help marketers to market themselves, focus groups with employers on how and what should be taught	USA	Written communication, oral communication, presentation skills, analytic skills, marketing competence, planning, creativity, listening, teamwork	Employers want graduates who can think logically and strategically, communicate ideas well. And work in teams, rather than specific functional business knowledge
<b>Hyman &amp; Hu (2005)</b>	Based on two national surveys (1995 & 2002) on U.S. based marketing faculty	USA	26 marketing skills based on earlier studies. In this study rated by marketing faculty at two points of time.	Fundamental Marketing Skills Management skills (decision making, leadership, planning, organizing, time management), Cognitive skills (Problem solving, Critical Thinking, Analytical thinking), Communication skills (Oral communication, written communication), Bridging skills (foreign language skills, cross-functional skills, cross-cultural competence), and interpersonal skills (small group skills, negotiation, networking, etiquette skills).
<b>Bruce &amp; Schoenfeld (2006)</b>	MBA graduates Competencies required for marketing, three international surveys of MBA students, alumina and employers Large scale web based data	Int'l	Marketing skills development, skills requirement, and areas where further education is needed Identifies a large scale of skills based on secondary data.	Companies find attractive from MBA graduates Decision-making under uncertainty (ability to adapt/change to new situation, ability to make decisions with imperfect information, ability to integrate information from a wide variety of sources), Communication skills (oral and written communication skills), Cultural and ethical awareness (cultural sensitivity and awareness, skills in corporate ethical conduct), Data collection and analysis (information-gathering skills, quantitative skills), and strategic/analytical thinking (ability

				to think strategically, ability to think analytically) Identifies a thinking-doing divide and suggests ways of overcoming this
<b>Dacko (2006)</b>	MBA education Survey on skills development in MBA programs	Europe	Survey used 22 key skills: analytical, computer, creativity, crisis mgt, decision making, ethical, etiquette, foreign language competence, initiative, interpersonal, leadership, negotiation, oral communication, persuasion, planning/organizing, problem formulation, risk taking, stress mgt, teamwork, time management, written communication	The research suggests six important skill weaknesses – decision making, leadership, problem formulation, persuasion, creativity and negotiation.
<b>Gray et al. (2007)</b>	Marketing education, essential knowledge and skills- 141 managers, 107 marketing students, 52 marketing academics	NZ	Knowledge areas for graduates: Strategic marketing, international and export marketing, b-to-b marketing, consumer behavior, product and brand management, pricing, market research and analysis, personal selling and sales mgt, societal and ethical issues in marketing, innovation and npd, services marketing, marketing logistics/distribution, marketing communications, retails marketing and management, direct marketing, internet marketing Skills areas for graduates: A willingness to learn, teamwork skills, oral communication, written communication, the skills to plan own work, problem solving ability, self-confidence, independent judgment, creativity, the skills to implement change, a multidisciplinary perspective, analytical skills, flexibility and adaptability, an awareness of ethical issues, strong interpersonal skills	The essential skills are ability and willingness to learn about product markets, to solve marketing problems, to communicate with external and internal stakeholders and to work in teams. A wide range of marketing knowledge on different subject areas is needed to set these skills in context
<b>Schlee &amp; Harich (2010)</b>	Content analysis of 500 marketing job positions at Moster.com	US, 5 cities	Conceptual knowledge, skills: meta-skills & technical skills	Notable differences between skills and conceptual knowledge requirements for entry-, lower-, middle-, and upper-level jobs. Technical skills are important at all levels
<b>Walker et al. (2009)</b>	In-depth interviews with 14 graduates and 14 employers, focus on transition from university to employment	Australia	A total of 58skills categorized under marketing skills, numeracy, computer skills, written communication skills, oral communication skills, interpersonal skills, team-working skills, problem-solving skills, comprehension of business processes and personal skills.	Most frequently identifies skills were communication skills, sales knowledge and analytical skills. Also specific competence such as an ability to have and apply marketing knowledge.
<b>Wellman (2010)</b>	Marketing graduates Identifying employability attributes required from marketing graduates, 250 job postings in internet	UK	In total 52 attributes were identified, common ones communications, interpersonal relationships, information and communications technology, planning, self-management, decision making and problem-solving. 22 personal traits were identified, e.g. creativity, responsibility, initiative, determination and confidence.	Educators should include desired attributes into marketing curriculums.
<b>Finch et al. (2013)</b>	Marketing education Survey of marketing practitioners to determine their top priorities for improvement in marketing education	Canada	72 items in clusters of knowledge and meta-skills. Knowledge cluster included strategic marketing, communications, channel management and marketing context.	Knowledge related to areas associated with measuring return-on-investment and strategic marketing. Also meta-skills; the ability to creatively identify, formulate, and solve problems: the ability to write in a business environment; the ability to set priorities.

The Finnish education system provides two scientific degrees for Economics and Business Administration. The lower university degree, Bachelor of Science (Economics and Business Administration) aims to provide the student with a knowledge of the fundamentals of the major and minor subjects and the prerequisites for following developments in the field, knowledge and skills needed for scientific thinking and the use of scientific methods, knowledge and skills needed for studies leading to a higher university degree and for continuous learning, and a capacity for applying the acquired knowledge and skills to work and adequate language and communication skills. (Government Decree on University Degrees 2004, SEFE 2011.) The higher university degree, Masters of Science (Economics and Business administration), aims at providing the student with good overall knowledge of the major subject, knowledge and skills needed to apply scientific knowledge and scientific methods, knowledge and skills needed for independently operating as an expert and developer of the field, knowledge and skills needed for scientific postgraduate education, and good language and communication skills (Government Decree on University Degrees 2004). Both lower and higher education are based on scientific research and professional practices in the field (Government Decree on University Degrees 2004). It is evident that the government decree integrates in both degrees the theoretical knowledge and practical skills of the professional field.

The Finnish Association of Business School Graduates, SEFE, defines the knowledge and skills for business graduates (both Bachelor and Master) in four categories. First, the business graduates should master a widespread basic knowledge on business, including areas of marketing, accounting and tax, management and leadership, finance, economics, business mathematics and statistics and business law. Also, they should master deeper knowledge in their own special knowledge area, such as marketing. Second, they should have a scientific orientation, namely the ability to learn new things, find information, problem solving, analytical preparedness, ability to perceive and manage unities, ability to understand and produce scientific texts, critical approach, identification and adaptation to change. Third, instrumental skills include teamwork skills, communication with native and foreign languages, IT skills, networking skills and personal marketing skills. Finally, the interpersonal skills include social skills and communication skills, initiative and creativity, ability to organize, intrapreneurship and risk taking, ethicality and internationality.

The universities have been developing different tools to enhance the knowledge and skills development. The teaching of knowledge areas is the traditional approach for the universities but more and more also the skills are being focused on. For example The Master's program in International Business in the University of

Vaasa has developed a skills handbook for the incoming students to analyze and develop their skills. In that program the skills are categorized in four. First there are academic skills, including library research, synthesis of data, critical thinking, active learning, problem solving, project management, creativity/innovation and numeracy. Second, self-management skills, including reflection on learning, self-awareness/assessment, action planning / decision making, time management, autonomy, initiative/proactive approach, budgeting, and career management. Third, communication skills, including written material, oral/visual presentation, active listening, foreign language(s), information skills, and IT skills. And fourth, interpersonal skills, including group work/teamwork, understanding others, negotiation, peer assessment, leadership, and adaptability. The student can himself define which skills he wants to develop the most; however, the different skills are rehearsed in different courses during the program. In the end handbook serves as a skills portfolio for the student.

SEFE (2011) listed development targets for higher business education. It was suggested that the graduates should have better understanding of business as a whole, customer focus and basic business processes. There should be more practical experience and application skills. The graduates should have better skills in ethics, creativity and social skills. They should aim for better understanding of international cooperation, different cultures and language skills. Also, the graduates need better understanding of project management, personal selling and sales management, leadership and human resource skills, practical management accounting and project accounting. Finally, they should understand the meaning of responsible business.

For this study, the marketing context is the area of product and brand development in general, more specifically the uncertain and early phase of service and product development, the fuzzy front end. Thus, based on the earlier research on important knowledge and skills in this context, essential knowledge and skills for marketing graduates and SEFE's national evaluation on the higher education for business administration, problem solving, teamwork, creativity and innovativeness and communication skills are chosen to be as focal skills for the development project.

#### *2.2.2.1 Problem-solving skills*

Marketing managers find marketing theory to be abstract and of little relevance to their work (Ankers & Brennan 2002; Brennan 2004). Indeed, there is a need to combine marketing knowledge and skills better together. It is not enough to apply some specific analytical tools, such as swot, pestel, 4P or experiential marketing framework to any situation. The students need to be able to contextualize the tool

for a specific context and be able to interpret the findings for that particular situation. This highlights the context dependency and relativity of marketing knowledge. Indeed, as structural frameworks are applied to a certain situation, the students do not only show the skills of applying the certain tool but the understanding of requirements, constraints and boundaries that occur in that certain situation. Also, this needs to be discussed and motivated, thus it requires critical thinking skills. This indicates the extended abstract level of understanding (Biggs & Collins 1982) and should be the aim at master's level of marketing education in the (research) universities.

The problem-solving skills are essential for marketing graduates (Gray et al. 2007). As marketing is a very practical profession, there are several different ways to practice the application of marketing knowledge. For example cases, labs, simulations, games, and another exercises aim at using specific tools to solve marketing problems. However, real life applications and client-based projects form a natural context for skills development. It forms a context that provides possibility to not only apply certain skills but deepen the understanding of real life problems, their complexity, relativity, fuzziness and constraints. Importantly they also show the uncertainty of the future, the constraints or lack of information and how there are no exact correct conclusions. Only the future may show, which solutions were the best. (Dacko 2006; Gibson-Sweet et al. 2010).

#### 2.2.2.2 *Teamwork skills*

In order to remain innovative and competitive the business are looking for employees who can collaborate, manage tasks and projects and learn effectively in teams (Piaff & Huddleston 2003). Indeed, teamwork in organizations take many forms, such as product development teams, production teams, management teams, temporary project teams, cross-organizational teams, and occurs in all organizational levels. Future marketers need not only work in teams but also be able to manage teams and team based organizations.

Indeed, student learning in teams can be highly effective as students become more engaged in learning and thus team-based projects are seen valuable to higher education for both pedagogical and future employment reasons (Freeman & Greenacre 2011). The benefits of teamwork have been argued to be the enhancement of students' social development, appreciation of diversity, critical thinking, and problem solving (MacGregor, Cooper, Smith & Robinson 2000).

However, there are challenges in successful team work both in working life and in education such as overdependence on a dominant leader, the tendency to conform, overcommitment to goals, social loafing, diffusion of responsibility and the

Abeline paradox (in which teams take action that most members disagree with because they fail to express their true feelings (Kayes et al. 2005). Team members often complain about wasted time in meetings. Students complain about being forced to work in teams with other students who are free riders, especially if the grade is based on teamwork (Chen, Donahue & Klimoski 2004). Regularly the teamwork reach only the level of group work, where an assignment may be divided between the members of the group, each student completing his or her own part and eventually, often the last night before the dead line, the separate parts are copy-pasted and put together. In the worst case this leads to a situation where the student may understand his or her part, but lacks the holistic understanding of a phenomenon (McCorkle et al. 1999; Piaff & Huddleston 2003).

Indeed, the teamwork assignment needs to be set so, that it requires the students to think and plan together throughout the project. The conclusion should be reached through working together as a team. This also requires a discussion of the difficulties and phases of teamwork as well as facilitation of the teamwork process. Thus, as Cunningham (1999) suggests, much more emphasis needs to be put on the development of team working skills. Attention is also needed in how to form and guide the team work challenges (Kayes et al. 2005).

Cross-functional teamwork refers to activity where people from different disciplines and functions work together towards the same goal. It has become an established strategy in new product development (Griffin & Hauser 1995; Song et al. 1996; Cooper 1999). In many cases companies seek to bolster cooperation between marketing, design, and engineering (Cagan & Vogel 2002) even though they may also combine other functions such as manufacturing. Different functions enable a project team to gather more diverse information and share ideas about what is commercially important, technically feasible, or difficult to manufacture (Kim & Wilemon 2002). If the cross-functional team members come from different backgrounds, this may increase the level of conflict; this is most evident between marketing and design (Holm & Johansson 2005). However, successful teamwork is not distinguished by the absence of conflicts but how those are solved (Dougherty 1992). Especially when a new product opportunity is characterized by high levels of technological and market risks, investments in high levels of cross-functional cooperation are warranted to increase success in new product development activities (Gemser & Leenders 2011).

However, even if the literature supports cross-functional integration in the innovation process, companies struggle to manage this integration successfully in the front end of innovation (O'Connor & DeMartino 2006; Martinsuo 2009). This integration seems to be most difficult to achieve between designers and market-

ers. When Holm and Johansson (2005) studied the relationships between industrial designers, marketers, and engineers, they found that industrial designers and engineers tend to establish a fruitful working relationship once they realize how they can learn from each other. However, they found that marketers and designers are often rivals. According to their analysis, this rivalry is based on the different views marketers and designers hold on matters such as attitudes toward products, sense of professional identity, corporate identity, and creating value as well as the differences in their approaches to the consumer and market research. Holm and Johansson underline that companies need to create a better learning relationship between designers and marketers in order to foster innovation. This supports the idea that cooperation between marketing and design students in higher education could be a fruitful learning experience, yielding benefits even before they enter the workforce.

The global business environment also sets new challenges for effective teamwork. Development projects need cross-cultural understanding and project members need skills in cross-cultural communication. If developers work in different locations, they must have communication skills in virtual platforms and cloud services. Thus working in international teams may enhance the skills needed in future work market. However, there is little research on international teamwork in marketing education literature.

Working in cross-functional teams during education could be a fruitful learning experience. The graduate teaching of new product development with cross-functional teams has inspired teachers around the world. For example, Lovejoy and Srinivan (2002) report ten years of experience in teaching a multidisciplinary product development course, Cardozo et al. (2002) describe an experiential approach to teaching new product design and business development in a year-long course, and Vogel, Cagan, and Boatwright (2005) describe the process of a cross-functional user-centered product design course. Love, Stone, and Wilton (2011) report different design methods used in teaching user-centered design within a product development course. Recently, the fuzzy front end has also received more attention, as Martinsuo (2009) reports an experiment on teaching the fuzzy front end of innovation with a focus on team learning and cross-organizational integration.

### 2.2.2.3 *Creativity and innovativeness*

Marketing involves doing things differently, combining old things with new ones, innovating, surprising, and delighting (McCole 2004). Marketing is closely linked to creative thought and imagination (Levitt 1963). As Titus (2007) emphasizes, Levitt's ideas hold significance for marketers today and "*marketing professional*

*are likely to find themselves under greater pressure to identify and produce new breakthrough products, services or marketing concepts”.*

Creativity is a function of expertise or knowledge, creative thinking skills and motivation (Amabile 1998). It is the ability to give birth to something that is both novel (such as original, unexpected, or surprising) and appropriate (useful or adaptive in terms of the task constraints) (Stenberg & Lubart 1999: 3). Within marketing, creativity is defined as a problem-solving process that aims to produce products, services, and marketing initiatives that are unique to the marketplace and create value for the customer (Titus 2000, 2007). Indeed, a creative original idea is not enough – in order for it to have value, the idea must also be useful and actionable (Amabile 1998) and implementable (Levitt 1963).

Creative problem solving combines both creative and critical thinking. Creative thinking is expansive, imaginative, and unconstrained thinking that is associated with exploration and idea generation. Critical thinking in turn is focused, logical, realistic, and practical thinking (Nickerson 1999: 399; Tassoul 2009). This is why marketing educators need to aim to enhance both the creative and critical thinking skills of their students.

Creativity has been recognized as important in marketing curriculums (Andersson 2006) and several attempts have been made to foster creativity and creative problem solving. For example, Lunsford (1990) describes a method to develop creative problem solving skills in marketing case analysis, McIntyre (1993) presents an approach to foster creativity in marketing class rooms, Ramocki (1996) develops a model that emphasizes the development of students’ cognitive creative processes, Titus (2000) elaborates on creative problem solving process and its use in marketing classroom, and Eriksson and Hauer (2004) suggest a creative approach by joining the learning of key marketing concepts and creative problem solving. McIntyre, Hite and Rickard (2003) explored marketing students’ creativity skills by using Torrance tests of creativity.

Marketing educators themselves use many creative methods in their teaching. For example, Strauss (2011) combines creative problem solving and client-based projects in a spirit of an innovative Apprentice television show, Stegemann and Sutton-Brady (2009) report the use of poster sessions in fostering creativity, and Ng (2006) reinforce creativity by the use of photoessays.

Also marketing students themselves find creativity important (McIntyre, Hite & Rickard 2003). McCorkle, Payan, Reardon & Kling (2007) analyzed the marketing students’ perceptions about creativity and their levels of creativity. They



found that marketing students perceived creativity important for their future career.

Titus (2007) developed the creative marketing breakthrough model that views creative marketing as a systematic problem-solving process that aims to produce creative marketing breakthroughs. In his model, a creative marketing breakthrough consists of any novel and valuable marketing idea, product, process, strategy or tactic. He argues that student's ability to produce creative marketing breakthroughs is affected by four key psychological constructs of creativity: (a) task motivation, (b) disciplinary knowledge, (c) cognitive flexibility, and (d) serendipity (Titus, 2007). These will be discussed next.

*Task motivation.* Creative work requires a high level of motivation (Collins & Amabile 1999: 297). Many individuals are not motivated enough to tackle creative problems as it takes a lot of time, energy, and effort (Titus 2007). The absence of motivation can lead individuals to give up the creative effort and fail to come up with valuable creative outputs. Lehrer (2012: 56) continues: *“the reality of creative process is that it often requires persistence, the ability to stare at a problem until it makes sense. It’s forcing oneself to pay attention, to write all night and then fix those words in the morning. It’s sticking with the poem until its perfect; refusing to quit on a math question; working until the cut of the dress is just right. The answer won’t arrive suddenly, in a flash of insight. Instead, it will be revealed slowly, gradually emerging after great effort.”*

Motivation can be either intrinsic or extrinsic. Intrinsic motivation implies on engaging primarily on a case for its own sake, because the student finds it interesting, exciting and personally challenging. Then again extrinsic motivation implies on a situation, where students are working on a task in order to earn some reward, e.g. study points and grades (Collins & Amabile 1999: 299). The teacher can affect the extrinsic motivation directly (e.g. by choosing interesting and challenging real life cases, showing the process of creative problem solving, explaining what to do in order to pass with different grades) and the intrinsic motivation indirectly (Collins & Amabile 1999: 306). From the experience I have noticed that students often find intrinsic motivation after digging into real-life cases and getting customer insight. At that point they seem to gain ownership of the project and knowledge, and the ownership seems to have a positive effect on their intrinsic motivation. Indeed, Stenberg and Lubart (1999: 9) also note that creativity does not only require motivation, but may also generate it.

*Disciplinary knowledge.* Individuals involved in creative work generally operate with a particular industry, discipline or area of expertise. Over time a significant amount of explicit, implicit and tacit knowledge is acquired on that discipline

(Amabile 1998). It is believed that heightened levels of disciplinary knowledge increase the likelihood of producing creative breakthroughs. (Titus 2007). However, it is argued that biggest problems we need to solve require the expertise of people from different disciplines (Lehrer 2012: 140). For the real life cases, there are different kinds of disciplinary knowledge. First, there is the business and marketing knowledge that is partly gained through earlier studies. Second, there is the case knowledge, the knowledge about the industry where the development project takes place. The teacher can enhance the understanding for example by coaching the students to use different tools to analyze the case or by using professionals on the different fields in teaching and discussing with students.

*Cognitive flexibility* has long been viewed as a desired trait for those wishing to enhance their creative output. Individuals that can think imaginatively and consistently use alternative approaches or pathways to solve difficult problems are said to be cognitively flexible in their thinking. In other words, they can think out of the box. The opposite of cognitive flexibility is functional fixedness, which concerns the inability to break free from conventional problem-solving pathways (Amabile 1998; Titus 2007; German & Barret 2005). The teacher can enhance cognitive flexibility by for example introducing creative methods and problems solving skills, helping students to combine ideas from different sources, using multidisciplinary or culturally diverse teams. The ability to transfer knowledge gained from different sources (such as hobbies, part time jobs, travelling) to the task in hands can be openly enhanced.

*Serendipity*. Many of the scientific discoveries or creative breakthroughs, such as penicillin and microwave oven have seemingly occurred by accident. Can a teacher plan a lucky coincidence? Apparently not. However, the teacher can discuss the role of serendipity in different cases and make this facet more explicit for the students.

The most important aspect of creative process is that it occurs within an environment of uncertainty. Hence, there is no assurance of producing a creative solution or marketing breakthrough (Titus 2007). Indeed, there are barriers to express creativity such as fear of failure, fear of doing something different and fear of taking risks (Anderson 2006). Bearing the uncertainty may be difficult and challenging for the students as many students want to make safe decisions in order to pass well and get good or satisfactory marks. Jumping into an unknown territory, going from the safe side to the wild side requires courage and braveness, letting to go from the usual and safe. As Lehrer (2012: 89) writes “there is something scary about letting ourselves go. It means that we will screw up, that we will relinquish the possibility of perfection. It means that we will say things we didn’t mean to

say and express feelings that we can't explain." This spontaneous "letting go" can be very frightening, but also an extremely valuable source of creativity (Lehrer, 2012: 89).

Also, as Titus (2007) remarks: "...one of the biggest challenges facing marketing educators is the need to persuade students to tackle difficult marketing problems without any assurance of finding a creative solution. This requires educators to convince students to invest considerable time and energy into problem-solving activities that may end in failure".

Teacher may try to enhance tolerating uncertainty for example by planning the development process less fuzzy and more systematic, by creating an atmosphere where students feel secure to express their ideas and letting themselves into trial and error –processes and by motivating the students to challenge themselves. For the students, it may also be valuable to notice other students or students groups tackling with similar kinds of problems. Teacher may enhance this by organizing meetings, discussions and presentation possibilities for the students.

#### 2.2.2.4 *Communication and presentation skills*

Several researchers have pinpointed the good oral and written communication skills as essential for future marketers (Cunningham 1999; Smart, Kelley & Conant 1999; Davis et al. 2002; Taylor 2003; Gray et al. 2007, Walker et al. 2009). The students need to be able to present their ideas, motivate them both orally and in writing, to be able to convince and persuade. Ulinski and O'Callaghan (2002) further divide oral communication skills to following instructions, listening skills, conversation skills, giving feedback, communicating with the public, meeting skills, presentation skills, handling client complaints, conflict resolution skills and negotiation skills.

As Schlee and Harich (2010) found out, oral and written communication skills and presentation skills are on the top of meta-skills required by employers at all levels of marketing positions. According to Young and Murphy (2003), explicit accreditation requirements, replicated academic research, consistent feedback from employers, college recruiters, and alumni strongly suggest that communication skills should be key issues in marketing education.

#### 2.2.3 *Summary*

The pedagogical challenge is to balance conceptual knowledge in marketing with practical skills needed to perform specific tasks. Conceptual knowledge focuses

on theoretical background of the discipline of marketing and has a long life cycle. Some practical skills, such as technical skills on the other hand, change rapidly. An excellent example of this is the social media and data based management skills needed in that. Those technical skills were not needed five years ago. (Schibrowsky, Peltier & Boyt 2001). Marketing in higher education tend to emphasize knowledge over skills as knowledge is perceived more important for marketing management positions. However, many graduates would need practical skills for entry-level positions in marketing (Davis, Misra & Van Auken 2002). Indeed, as both knowledge and skills are important, the marketing educators need to blend between knowledge and skills in their teaching. In this study the focus is on problem-solving skills, teamwork skills, creativity and innovativeness and communication skills.

## 2.3 Challenges in aligning client-based teaching of fuzzy front end

The above discussed experiential learning pedagogy and the specific marketing context set challenges for teaching marketing, both knowledge and skills. Hyman and Hu urge marketing teachers to consider how to incorporate professional skills training into teaching objectives, what exercises would be most effective in fostering professional marketing skills and what tools are needed to assess the adequate attainment of professional marketing skills?

Biggs emphasizes that the development of both knowledge and skills should be based on the principles of constructive alignment where the learning objectives (awareness of the knowledge and skills to be developed), teaching and learning activities (knowledge and skills development in learner-centered process) and assessment (evaluation and reflection on knowledge and skills) area aligned together and communicated openly to the students (Biggs 1996, 1999a, b; Bedrow & Evers 2011.) Based on the discussion on experiential learning and essential knowledge and skills required from future marketers I bring up several questions and challenges for client-based higher marketing education in the specific context of fuzzy end of innovation. These questions and challenges have structured the development work during the action research period.

### 2.3.1 *Setting the intended learning outcomes*

When planning the course and setting the intended learning outcomes, how should the knowledge and skills be balanced? Should the intended learning out-

come reflect the needs of the client or the student or both? How should these be balanced? The context of this development work is a master's level. What kinds of intended learning outcomes enhance the higher cognitive outcomes and practical skills needed on this level? If the experiential learning is set as a background teaching philosophy, how should it be implemented into setting the intended learning outcomes?

### 2.3.2 *Teaching and learning activities*

Shuell (1986: 429) argues that *"if students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to let students to engage in learning activities that are likely to result in their achieving those outcomes. ... It is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does."* This raises a question of what kinds of teaching and learning activities enhance the experiential learning. And how should the teacher aim to implement the experiential learning cycle into the activities?

Another question is that how should the level of the challenge be determined? For example, what kinds of challenges are more suitable for bachelor level of studies and what kind of challenges foster the master's level of understanding. And further, how should the specific knowledge and skills be implemented into the challenge?

Who should decide on the challenge given to the students – the real life and practical clients, the faculty representative teacher, the students themselves or somebody else? Also, who should decide on the activities suitable for the project? What is the role and responsibility of the teachers and students? Indeed, not only educators have a responsibility to prepare students with relevant knowledge and skills for future career success, also future marketers, that is students, have a responsibility of making an effort to acquire and apply the relevant knowledge and skills (Dacko 2006).

What is the role of the teaching in project work? Should the students be encouraged to work independently and find their own solutions and own way of working or should the teacher implement a specific timetable and activity list beforehand? How should the learning be supported? Then again, as Titus (2007) notes, it is a real challenge for marketing teachers to motivate and inspire the students to use enough time and effort in their studies so that they would be able to create innovative outcomes.

What is the role of learning environment or place in learning? Can different environment enhance the deep learning and help to complete the learning cycle? For example the concrete experience of a certain place may be different depending on whether the students actually visit the place or hear a presentation about the place. Further, the knowledge and skills are not only gained through education but students learn also through other activities, such as travelling, student union, part-time jobs, sports and other hobbies. Can and should these be implemented into teaching and learning activities?

### 2.3.3 *Assessing learning outcomes*

How the client-based projects, creativity and creative problem solving should be assessed? Traditionally the focus has been on summative assessment, the final mark. However, in the light of experiential learning, the trial and error –processes should be encouraged. Should we focus more on formative assessment?

Based on the ideas of constructive alignment, assessment should focus on intended learning outcomes. This, if the intended learning outcomes focus on skills development, then the assessment needs to focus on those as well. Further, experiential learning theory focuses on individual experience and learning through transformation of experience (Kolb 1984). Thus, students' own understanding of the transformation becomes important. Thus the assessment should include elements of reflection of learning. How should we balance between different aspects of assessing?

Keeping these questions and challenges in mind, I next turn into discussing the methodological choice of the action research and describe the research design applied in this study.

### 3 METHODOLOGICAL CHOICES AND RESEARCH DESIGN

The study started as a development project in April 2007. The main focus was in practical problem solving, where the every-day development activities concentrated on building a marketing course with sufficient content and structure to enhance the experiential learning in the context of fuzzy front end.

However, as typical for teacher-researchers, I started to find out about the earlier literature on several aspects concerning the every-day development work. More I studied and applied my learning to my own development work, more questions arose. I identified several research gaps and I started to reflect on my learning by writing my two first conference papers. I was already deep in the middle of action research process.

Indeed, as the focus of this study is in developing practice, the action research was chosen as a research methodology for this study. In this chapter I discuss action research as a methodology and build my research design based on the action research perspective.

#### 3.1 Action research as a methodology to develop higher marketing education

Action research involves close collaboration with the research object and focuses on practical problem solving aiming at changing and improving practice (Eriksson & Kovalainen 2008: 193). It is best understood as a research orientation rather than a particular method (Ladkin 2004).

Action research has its roots in the early 1930s and 1940s. It was first used mainly to support social change and social justice (e.g., Lewin 1946) and is still used for these aims (McNiff & Whitehead 2006: 36). Since its introduction, action research has become increasingly popular around the world as a form of professional learning. It has been particularly well developed in education, specifically in teaching (Kemmis & McTaggart 2000) and curriculum development (Elliot 1991), and is now used widely across professions (Ladkin 2004; Stringer 2007). Business research is a good starting point for action research, as it is often related to practical business questions and involves researchers collaborating and actively engaging in the development of business (Eriksson & Kovalainen 2008: 193; Malmi 2005). Also, action research is similar to the constructive approach to research (Kasanen, Lukka & Siitonen 1993). Indeed, action research is especially

useful when researching process-related problems such as learning or change (Eriksson & Kovalainen 2008: 199).

Action research begins with an experience of a concern and continues with a developmental process that shows cycles of action and reflection (McNiff & Whitehead 2006: 32). This cycle of action and reflection is an important tool in action research. Several more or less modified cyclical models are based on the cycle developed by Lewin (1946), “observe – reflect – act – evaluate and modify.” The cycle of action and reflection is similar to the hermeneutic circle, where new, more specific knowledge and understanding create new questions that a researcher may study (Gabriel 1990). Each cycle produces new ideas and new questions that may be acted upon and thus a cycle may then turn into the next cycle (McNiff & Whitehead 2006: 36). These cycles enable change in the research context. The cyclical framework of experiential learning (Kolb 1984) and the model of inquiry-based learning (Hakkarainen, Lonka & Lipponen 2004) also resemble the principles of the cycle of action and reflection.

A cycle of action and reflection should be read as a continually iterating set of activities (Eriksson & Kovalainen 2008: 199). While researcher and other participants work through the major stages, they will explore their activities through a constant process of observation, reflection and action. At the completion of each set of activities, they will review, reflect and re-act (Stinger 2007: 9). In reality, action research may not be so neat, as different stages overlap and initial plans must be revised on the basis of experience and learning (Kemmis & McTaggart 2000). As Stringer explains (2007: 9): “*People will find themselves working backward through all routines, repeating processes, revising procedures, rethinking interpretations, leapfrogging steps or stages, and sometimes making radical changes in direction.*” This iterative and even messy nature of action research is an important and necessary part of the research (Cook 1998; Eriksson & Kovalainen 2008: 199).

Action research is an ongoing process that is generative and transformational. The end of one thing becomes the beginning of something else (McNiff & Whitehead 2006: 33). This means that the starting point is very open, leading to several different possible research questions that may in part be parallel, overlapping and even contradictory. This is not only an opportunity, but also a threat to action research. It is an opportunity when reflection and observation guide the research into interesting new areas. Often there may be many different interesting possibilities for how to continue with the research and sometimes it may become difficult to choose the departure point for research (Cook 1998). However, the open starting point may pose a threat – the researcher might lose his or her focus on the



main developmental task and thus become lost. Our world is not systematic or linear and the kind of messiness that is present in much action research is considered to be important. Indeed, Cook (1998) found that many action researchers need to balance between working with different kinds of models and thinking freely and adventurously.

The open starting point also means that not all of the final results might be known in advance (Eriksson & Kovalainen 2008: 196). The researcher should remain sensitive to surprising and unexpected results. In fact, if the researcher is looking for interesting final results, such as certain methods or models, he or she should not plan the action research too rigidly. Unexpected challenges, difficulties, setbacks and learning are interesting results from action research. Aaltola and Syrjälä (1999: 18) emphasize the process orientation of action research, where the research is seen as an ongoing process. Thus, the end result of action research is not a static model or framework, but a process that is understood in a new way. In this study the overall focus is on the process of managing the teaching. The role of the researcher is that of reflective practitioner (Schön 1983) where the practitioner involves her- or himself in the reflection-in-action process.

Marshall (2011) categorizes different approaches of action research based on where the contribution of action lies, as being first-, second- or third-person action research. She notes, however, that this categorization is based on flexibility and scope, as these aspects commonly overlap. *“First-person action research involves the researcher adopting an inquiring approach to their own assumptions, perspectives and action, seeking to behave awarely and choicefully in a given context, and to develop their practice in some way. Second-person action research involves people coming together to inquire into issues of mutual interest.”* There is often an initiating researcher, but his or her intention is to help create a community of inquiry in which all participate in decisions about the process as well as the content of the research (Whyte 1991). Third-person action research seeks to stimulate engaged, sustained inquiry in a wider community such as an organization or a geographic region over time (Marshall 2011).

Action research is a research orientation that is concerned with practice, reflection and potential for change (Marshall 2011). Heikkinen and Jyrkämä (1999: 36) distinguish four common factors across action research, namely (a) focus on practical development, (b) change intervention, (c) reflectivity, and (d) active participation by different participants.

(a) The primary purpose of action research is to improve practice by producing practical knowledge that is useful to people in the everyday conduct of their lives (Elliot 1991: 49; Reason & Bradbury 2001: 2; Ladkin 2004; Marshall 2011). This

notion positions action research within the pragmatic research tradition, where the value of research lies on how useful it is. However, action research includes at least two different schools of thought, the North-American-British school of thought that emphasizes the pragmatic orientation and Australian school of thought that focuses on more critical orientation (Tuomi & Sarajärvi 2002: 40). This study emphasizes more the pragmatic tradition.

However, as Kemmis and McTaggart (2000) note, the term practice is not self-explanatory. They distinguish five different approaches to studying practice based on the dichotomies of whether practice is seen as individual or social and whether the perspective is objective or subjective. The understanding of practice thus leads to different ways of conducting research. Practice can be seen as (1) individual behavior that can be studied objectively (outsider view) or as (2) a group behavior that is likewise studied objectively. Furthermore, practice can be seen as (3) individual action that can be studied from the perspective of the subjectivity or as (4) social action or tradition that needs to be understood from the perspective of subjectivity. Finally, (5) practice can be understood as reflexive and should be studied dialectically. This study attempts to understand practice from the inside, that is from the perspective of an individual practitioner, teacher and researcher.

(b) Change intervention means that action research aims at developing and changing things for the better through research; it aims for new beginnings. Change happens when people learn to improve practice (McNiff & Whitehead 2006: 32). Change is central for action research in two different ways. First, the reality is changed in order to research it and second, the reality is researched in order to change it (Kemmis & Wilkinson 1998: 21).

(c) Reflectivity means that action research is constantly looking back on the actions taken and modifying the new actions if needed. Thus, reflectivity enables the cumulative and self-constructive analysis of knowledge and skills (Kiviniemi 1999: 68). Reflectivity is critical in turning practical development work into scientific research. In this study reflectivity occurs in different essays and other research reports throughout the research process.

(d) Action research is participatory as the relationship between the researcher and research object is close and collaborative (Eriksson & Kovalainen 2008: 196) and takes place in a social context that involves other people (McNiff & Whitehead 2006: 32). However, the emphasis differs between different approaches (Marshall 2011). Especially in community-based action research (Stringer 2007) and participatory action research (Whyte 1991), the role of participants is emphasized and the research aims at enabling and empowering the participants to solve their own problems. Sometimes the participants need to critically reflect on their own un-

derstanding, valuation and skills in a social context. As such, action research may be critical in nature (Aaltola & Syrjälä 1999: 14).

The researcher does not work in isolation, but is part of the social community under study. Researchers are often seen as outside facilitators, who aim to make change possible, promote reflection over time and finally do research on this particular case. (Eriksson & Kovalainen 2008: 194). The researcher may have different positions and roles in the study. First, some action researchers position themselves in maintaining an almost exclusive self-perception of themselves as external researchers who stand outside the action, watching what other people are doing and asking what is happening. This study adopts a position, where the researcher becomes a participant and involved in the development. Indeed, most participatory action research (e.g., Whyte 1991; Wadsworth 1998; Kemmis & McTaggart 2000) follows this second principle. However, the role of the participants may differ, ranging from merely serving as sources of data to developing together to further enabling change and even empowering other people. Third, some forms of action research focus on self-study (e.g., McNiff & Whitehead 2006), where the focus is on the individual researcher and their own learning.

Action research is mostly categorized as having a qualitative. The actual methods used in an action research study vary according to the specific research questions, and several kinds of methods for data gathering and analysis may be used both qualitative and quantitative. Typical methods include ethnography, interviews, observation, and surveys (Eriksson & Kovalainen 2008: 200; Heikkinen & Jyrkämä 1999: 55).

After discussing action research as a methodological choice for this study, I will turn back to my own action research project and describe its design and process.

## 3.2 Building a research design

The overall aim of this study is to understand the managerial challenges related to client-based teaching of marketing knowledge and skills in the context of early phase of product and service development. In order to understand these challenges an action research study was set up. It involves several years of development, participation and prolonged engagement to the topic. Next I present the research design by first introducing my philosophical position as a researcher, then by describing the course context where the actual development took place and finally by describing the cycles of action and reflection that have occurred in this study.

### 3.2.1 *Philosophical position of the teacher- researcher*

The philosophical position of the researcher and the research concerns with the assumptions about the ontological, epistemological and methodological principles that guide the research process. Ontology concerns the idea about the existence of and relationship between people society and the world in general. In this study, the reality is understood as constructive. This view assumes that world and truth are relative to our place and time in history, that social actors produce social reality through social interaction and that reality for the researcher is an output of social and cognitive processes. (Gabriel 1990; Eriksson & Kovalainen 2008: 12–14.)

While ontology refers to how the researcher understands the existence, epistemology concerns with how the knowledge is produced and argued for. This study is based on subjective epistemological view that emphasizes researchers' observations and interpretations as access to the external world. Objective knowledge does not exist, but all knowledge is relative to the knower (Gabriel 1990). The researcher is thus an integrative part of the knowledge creation process and interpretation is an important part of analysis. It is assumed and approved that there are many possible and meaningful interpretations of the same data. (Lincoln & Cuba 1985: 37; Stringer 2007: 170–171; Eriksson & Kovalainen 2008: 14–15, 206.) Action research integrates experiential knowledge (gained through direct encounter with persons), practical knowledge (gained through the doing of things, demonstrating through skill and competence) and presentational knowledge (gained through ordering the tacit experiential knowledge into patterns) (Ladkin 2004: 538).

Methodology concerns with organizing principles for guiding the research process (Eriksson & Kovalainen 2008: 14–16). Epistemology and methodology are closely linked. While epistemology concerns with question what can be known, methodology concerns with the practical question, how is the knowledge generated. In this study action research is used as a methodological research orientation using qualitative methods. Next I will describe more closely the course context.

### 3.2.2 *Course context description*

The pilot course used in my action research is a master's level marketing course called Concept Factory. It is part of the creative problem-solving section within the master's program on marketing management at the University of Vaasa, Department of Marketing. The aim of the creative problem-solving section is to engage the student in an experiential learning process where she aims to resolve

some authentic real-life marketing problems (Opinto-opas [Study guide] 2007–2008). The student may choose between different paths to do this. Concept Factory is one of those paths – it is a practical marketing course where students work in teams to tackle different kinds of real-life marketing problems, mainly in the context of early phases of service and product development, and construct solutions for the companies. During the action research period (2007–2013) this focus has remained unchanged.

Even though the Concept Factory as a name was launched in 2007, the idea of experiential multidisciplinary course in the context of fuzzy front end had been tested already over a decade earlier in the department. There had been two extensive international and multidisciplinary projects where designers and marketers worked together. The first one focused on furniture design and the second on travelling experiences across the sea between Finland and Sweden. The projects were financed externally, there were several partners and a lot of effort was put on these projects. After these projects the idea continued in a form of an integrated marketing course, where students worked together with companies in marketing projects. However, the management of the marketing department wanted to place more emphasis on systematic development of the teaching in this challenging context. Thus an internally financed project was set to develop the experiential learning environment called Concept Factory. This is when I as teacher-researcher started working on the project.

The learning outcomes of the Concept Factory have been developed during the action research project. They are two levels, general and specific. The general learning outcomes are specified as follows: after completing the course the students are able 1) in teams to plan and conduct a user-centered development project to serve as the basis of managerial decisions, 2) to act flexibly and professionally with different parties in development projects, 3) to choose and creatively apply relevant theoretical and empirical frameworks, methods, data and tools to conduct the project, 4) to discuss the development of the case company in a professional manner based on their project, 5) to evaluate the project work and 6) to assess their own professional growth. (Opinto-opas [Study guide] 2011–2012).

The specific learning outcomes for each course have been specified according to different client projects. The courses have had different marketing focuses, such as new service development, brand building, integrated marketing communication, product testing and user-centered product development. The special focus has been in applying marketing knowledge through problem-solving, creativity, teamwork and communication. Teaching and learning activities have been specified based on the client projects. Thus different teaching methods, coaching ap-

proaches and learning activities have been used. There has been an emphasis to use cross-functional teams or even international teams to foster creativity and sense of fuzzy front end as a context.

During the overall action research study period, 184 students, out of which 122 marketing students, have participated the Concept Factory courses. They have produced altogether 51 group assignments for real-life clients. Due to the page constraints, each course and its' context is described in more detail in Appendix 2. The summary of the courses is presented in Table 2.

**Table 2.** Summary of the pilot courses.

<b>Year</b>	<b>Topic</b>	<b>Students attending the course</b>	<b>Clients</b>	<b>Groups / outcome</b>
2007	Several client-based projects	23 marketing students from 3rd and 4th grade	12 clients	12 assignments (in pairs, one individually)
2008	Several client based projects	21 marketing students, 3rd and 4th grade	6 clients	6 groups (2–4 students/group)
2009	Small and challenging group	8 marketing students, only 4th or 5th grade	2 clients, each 2 cases	4 groups, only 2 finished properly
2010a	The Future Fair in Umeå	27 students, 20 international students from UID, 7 Finnish marketing students	One real life starting challenge	6 groups, each group presented several concepts
2010b	The Future Festivals in Vaasa	34 students, 17 Swedish design students and 17 Finnish marketing students	One real life starting challenge	6 groups, 6 concepts
2011a	Regional Marketing Project "Pohjanmaan markkinointihanke"	28 students, 14 marketing and 14 students of communication or Finnish language	One real life starting challenge	6 groups, 6 concepts
2011b	"Value factory" - Self steered groups	18 marketing students more independently working with the client	4 clients, one including 2 cases	5 groups (3–4 students/group)
2012	Stundars – open air museum	25 students, 14 marketing students and 11 students of communication or Finnish language	One real life starting challenge	6 concepts
		184 students, 122 marketing students, 62 students from other disciplines		51 group assignments

The pedagogical basis for the Concept Factory is experiential learning (Kolb 1984), even though there are similarities with problem-based learning (Boud & Feletti 1999) and inquiry-based learning (Hakkarainen, Lonka & Lipponen 2001). The pedagogy emphasizes the students' role as active learners and their responsibility for their own learning. The students' theoretical background knowledge is linked to its real-life application. The teacher's role is consultative, and the teaching and learning activities have been designed to support and facilitate the process of completing the assignment. The students are credited according to their projects; they could receive 4–15 Ects study points (European Credit Transfer System) graded on a scale of 1–5/failure. The assessment criteria have been developed over the years, as emphasized in Essay 5.

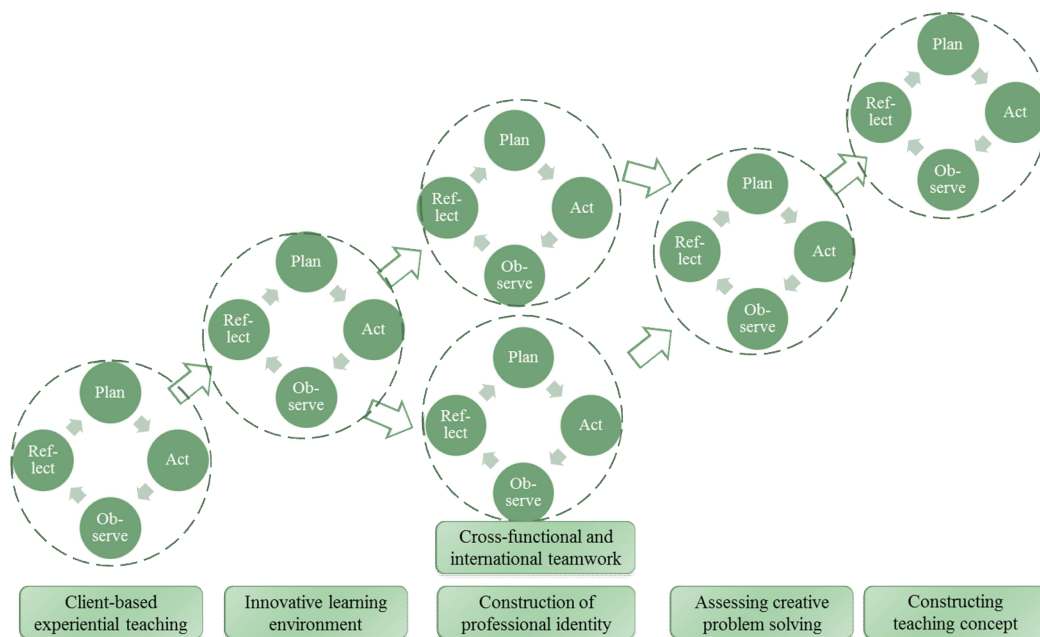
Even though several matters have changed each year, there are some aspects that have remained constant during the action research period. First of all, the focus has been on practical problem solving in real-life cases. Second, social collaboration in the form of projects and teamwork has been emphasized; the aim has been to work in cross-functional teams. Third, the concrete student experience has been emphasized by moving the course to different locations, mostly outside the university campus, or by asking the students to get involved in the case by visiting the client premises. The Western Finland Design Centre, Muova, has been an active partner in several projects in order to foster creativity, and for several years the weekly meetings were held in Muova. Fourth, the course has emphasized the coaching process from the very start, and the role of the teacher has been to serve as a facilitator, coach or mentor. Fifth, the teacher-researcher has been the same during the research period, although also other teachers have taken part to different courses.

### 3.2.3 *The cycles of action – reflection*

During the action research process the Concept Factory has occurred eight times. In each case the cycle of action and reflection has been obvious, as I have *planned, acted, observed and reflected* on some specific aspect of the course. However, in this study, the cycles of action and reflection are twofold and layered. The first level covers the overall aim of the study. It is an “umbrella” level that aims at discovering the managerial challenges in teaching through client-based marketing development projects. This covers the aim of the whole study and the results of this level are reported in the Chapter 5 of this research report.

The second level of cycles of action and reflection is the annual level, as each year the pilot courses have been planned based on earlier feedback and reflection,

acted upon, observed and again reflected. Figure 4 illustrates the cycles of action and reflection in this study.



**Figure 4.** An example of a cycle of action and reflection illustrating the process of the action research.

The annual level is messier than the first level. Multiple ideas and several innovative paths have come to light. Research questions have been formed in order to more specifically focus on certain aspects of development. For each research question, suitable theoretical literature has been used to form an understanding of the matter. This is then reported in a form of an essay. The specific essays look into different aspects of developing marketing education; namely, implementing experiential learning into the marketing curriculum (Essay 1), constructing a creative and effective learning environment (Essay 2), teaching the fuzzy front end of innovation in cross-functional and international teams (Essay 3), understanding how to enhance the construction of professional identity (Essay 4) and how to assess the client-based marketing development projects (Essay 5).



**Table 3.** Essays on different phases of the action research project.

Essay	Aim	Theoretical background	Method/data	Main results	Conference presentation	Publication
1. A Holistic Model for Learning Enhancement in the Context of Higher Marketing Education	How to enhance deep learning in higher marketing education? – a managerial perspective	Experiential learning theory, constructive coaching, learning environments	Desktop, student feedback, interviews	A holistic model, for learning enhancement, challenges for implementing experiential learning pedagogy	Academy of Marketing 2008, First Nordic Conference on Experience 2008, Laurea – Learning by Developing 2008 /OECD What Works in Higher Education 2009	Earlier versions in LbD 2008 / AM2008
2. Using pictorial collages in user-centered construction of a creative and effective learning environment	How to construct a creative and effective learning environment for business students?	Learning environment research	Qualitative user data, pictorial collages, participatory action research	The different elements of creative and effective learning environments	Laurea – Learning by Developing 2009, Asia-Pacific ACR 2012	Asia-Pacific Advances in Consumer Research 2013
3. Teaching the fuzzy front end of innovation: real-life application with cross-functional and international teams	What are the challenges in supporting experiential learning in an international and multidisciplinary course context?	Fuzzy front end	Student learning diaries, 2010a,b project memos and teacher interviews	Cultural, educational and professional differences	Annual Conference of the Academy of Marketing Science 2012	Conference proceedings of the Academy of Marketing Science AMS 2012
4. Making sense of marketing students' professional identity construction through a multidisciplinary project course	How do marketing students make sense of their professional identity?	Social identity theory, principles of social identity construction	Student learning diaries, 2010b, content analysis	The different ways in which an experiential course enhances the construction of professional identity	ELSIN – Education, Learning, Styles, Individual difference Network 2011	Conference proceedings of ELSIN 2011
5. The challenge of assessing creative problem solving in client-based marketing development projects: A SOLO taxonomy approach	How to assess client-based marketing development projects?	Creativity in marketing, constructive alignment, assessment, Solo taxonomy	Content analysis based on student project reports	Assessment framework	Laurea - Learning by Developing 2012	Journal of Marketing Education, 2013

The essays were chosen as a form of reflection and learning in order to bring forward the findings throughout the action research process, to open findings for public discussion and thus validate the findings. The essays have gone through a

blind review process. They have been presented to public academic audience (marketing and pedagogical) in order to engage into reflective discussion and seek for deeper understanding on the relevance and limitations of the findings. This emphasizes also the cumulative and self-constructive nature of action research where the developmental cycles open new paths and new research questions (Kiviniemi 1999: 68). The essays, their aim, theoretical background, method and data, main results, conferences where presented and publications are listed Table 3. The first part of the discussion chapter (5.1) has also been presented in the MEA – Marketing Educators' Association's Annual Conference (2013).

#### 3.2.4 *Data gathering and analysis*

The data for this study is qualitative and diverse in nature, which is typical for action research. The 51 written group assignments illustrate both the outcome and process of the client-based projects. The individual learning diaries that each student has written is another main source of data. The learning diaries include not only a description of what the students have done, but also analyses of their own learning. The diaries include feedback and feelings, stories of frustration and delight. Some of them are only around 12 pages, but most are 20–30 pages and the best of them include open and sincere evaluation of self-learning. Both the depth and length of the learning diaries have grown over the years, as more emphasis has been put on them. All learning diaries are descriptive and analytical; many of them reach the level of critical reflection.

In addition to group assignments and learning diaries, the data consists of formal student feedback (both anonymous and signed) and more informal discussions with the students before, during and after the courses. Some students have also written extra feedback in the form of emails.

In some projects the clients and other parties involved in development projects have been interviewed. These organizations include the regional development organization Vasek and other universities such as University of Umeå, Institute of Design, (Sweden), Leeds Metropolitan University and the University of Sheffield, (UK), University Consortium of Seinäjoki, and the Tritonia edulab. Formal open-ended client feedback was collected in 2010–2012, the questions are included in the Appendix.

Finally, this study is not in isolation – at the same time, there has been an emphasis on general curriculum development at our university and department. Concept factory has been a pilot project in a national curriculum development project W5W<sup>2</sup> that focused on bringing learning objectives into all university curricu-

lums. All this has resulted in formal and informal discussions with fellow teachers and other colleagues and have affected how the interpretation has evolved.

The data was analyzed by the means of qualitative content analysis (Miles & Huberman 1984: 55–58; Spiggle 1994). Each essay has its own angle and thus the data has been analyzed according to that specific research question. The analysis has been guided by research questions (Tuomi & Sarajärvi 2003: 94). The general analysis follows the guidelines suggested by Miles and Hubermann (1984) and Spiggle (1994). The researcher has first familiarized herself with the data through several readings of the data. As the data consists of group reports and learning diaries, this has been important also for the assessment of the student work. After this, with a specific research question in mind, the data has been categorized. Categorization refers to the process of classifying the units of data (Spiggle 1994). Thus notions concerning the chosen research question have been extracted from the overall text. Based on these the higher-order conceptual constructs, e.g. themes have been created. This abstraction groups previously identified categories into more general, conceptual classes (Spiggle 1994).

The logic of reasoning is mostly inductive, where the research proceeds from empirical findings to theoretical propositions (Eriksson & Kovalainen 2008: 22–23). This is most explicit in Essay 2, where students were asked to complete collages on their studies and they were interviewed afterwards. The interview transcriptions were read through several times and the data was coded inductively based on the meanings that emerged from the data. The coded data was then categorised into different themes and finally the categories were grouped together on the basis of similarity and difference (Spiggle 1994). The metaphor of safety-net was used to interpret the web of meanings.

The Essay 4 that focuses on making sense of professional identity construction follows more the logic of abduction. Abduction refers to a process of moving from the everyday descriptions to categories and concepts found in earlier literature (Eriksson & Kovalainen 2008: 22–23). In this case the empirical findings from the student learning diaries and feedback forms were analyzed aligned with the theoretical framework of identity construction. The data gave insight into the theoretical construct in this particular context and the theoretical understanding gave guidelines for analyses.

The interpretation aims at making sense of the data and analyses through more abstract conceptualizations. Thus interpretation represents a synthetic and holistic view of the data (Spiggle 1994). The integration of findings and interpretation is most explicit in Chapter 5 where my aim is to build more understanding of the

managerial challenges. While the essays have used different parts of the overall data, this phase looks back and covers the overall data.

Case illustrations included into Chapter 5 provide insight into teacher-researcher's reflections and descriptions of the actions that have taken place. Specific student data used in essays is described in each essay respectively. Student data from year 2012 is used to illustrate the findings in Chapter 5. Each extract is coded by sex, number and a year of evaluation (e.g. F6/2012)

## 4 SUMMARY OF THE ESSAYS

The essays illustrate the reflection and learning that has occurred during the different phases of the research process. In this chapter I present the aims, theoretical underpinnings, methodological choices, main findings and focal contribution of each of the five essays.

### 4.1 A Holistic Model for Learning Enhancement in the Context of Higher Marketing Education

Success in contemporary business life requires constant creativity and innovation. The ability to invent new products and customer experiences for a changing market is seen as imperative for success. The changing business environment influences not only marketing but also marketing education. In order to prepare students for their future careers, they need to be taught how to apply the theoretical concepts of marketing in real-life problem solving situations. In this way they gain both deep understanding of theoretical constructs and practical marketing skills. But how should we teach students to work in complex, uncertain, and even fuzzy business contexts that require creative problem solving?

Based on over a decade of experience and over a hundred master's level student projects as background data, a holistic model for learning enhancement is presented. The context is real-life development projects for client companies. The phase of marketing education is the master's level.

The model integrates experiential learning, different learning environments and constructive coaching in order to support students' learning process. Experiential learning emphasizes a holistic learning process, where concrete experience, reflective observation, abstract conceptualization and active experimentation alternate. Learning takes place in several learning environments, namely internal, external and virtual. The constructive coaching process emphasizes the teacher's changing role. She is no longer a traditional knowledge transferor, but a coach who aims to inspire the students to engage in knowledge creation processes. A coach needs to take different roles in different phases of the students' learning process.

Innovative project work in a business context requires not only planning and control but also creativity and flexibility. The three parts of the model affect how development projects based on real-life situations can enhance students' deep learning. The model can be used to enhance learning in three ways. First, the

teacher can plan the development projects based on the learning cycle of experiential learning in order to enhance the holistic experience. Second, the teacher can explicitly use different learning environments in order to deepen the students' experience and allow the experiential learning to unfold. Third, the different roles of the teacher emphasize the teacher's possibility to enhance the students' learning. Constructive coaching can help the students to acknowledge new aspects and motivates them to complete the tasks. The holistic model should be seen as dynamic and relative, adapting itself to contextual demands.

The focal contribution of this essay to the marketing education literature is the holistic integration of experiential learning theory, learning environments and constructive coaching. The model also serves as an *A priori* model for the action research project.

[The earlier versions of this essay have been published in the proceedings of the Academy of Marketing Annual Conference (Jaskari 2008a) and in the Learning by Developing – New Ways to Learn, Proceedings of the 1st Conference of Innovative Pedagogical Models in Higher Education (Jaskari 2008b).]

## 4.2 Using pictorial collages in user-centred construction of a creative and effective learning environment

Contemporary pedagogical approaches emphasize learner orientation rather than teaching orientation (Biggs & Tang 2007, 13; Zepke, Leach & Prebble 2006). These approaches emphasize students' constructive, deep understanding instead of shallow learning strategies. Frameworks such as constructive alignment provide tools for teachers to enhance deep learning (Biggs & Tang 2007: 50-54).

The size and the form of a learning place govern much of the teaching that happens. Although its influence will vary from teacher to teacher, the physical environment plays a significant role in how teachers approach their teaching or how they view what is possible within a particular place (Jamieson et al. 2000). The success of a learning-oriented perspective depends on the creation of an effective learning environment (Gonzalez et al. 2004; Young 2002). An integrated learning environment has been suggested to improve the ability to be creative and effective in solving problems in different contexts (Eickmann, Kolb & Kolb 2004). Even though the place where we learn is considered very important to learning, it has been argued that learning programs should focus more on activities, with less focus on space and place (Beard & Wilson 2006: 79).

The aim of this study is to construct suggestions for developing a creative and effective learning environment. First, a brief literature review introduces the earlier research on internal, external and virtual learning environments. Second, I apply a projective collage technique to reveal the students' ideas and thoughts concerning their studies, and discuss the results alongside relevant earlier literature on learning environments. Third, I apply this knowledge in the creation of a model of a creative and effective learning environment. Finally, the paper provides suggestions for how teachers can create and maintain a learning environment. This paper adopts a learner-centred approach in the context of higher marketing education at master's level.

The results show four major meaning themes for studying. These themes are (1) *business and pleasure*, (2) *I and others*, (3) *concentration and inspiration*, and (4) *safe and extraordinary*. The theme *business and pleasure* shows how students balance between hard work and free time. Students see studying as goal-oriented hard work, whereas they mainly experience feelings of pleasure after lectures, or at least outside lecture halls. The theme *I and others* illustrates the meanings attached to self-oriented studying and social networks. Academic degrees are personal and focus on individual development; however, the students' friends, fellow students and teachers form an important social network that affects studies both inside and outside the university campus.

*Concentration and inspiration* as a theme refers to mental models of studying. Concentration is focusing on a certain topic and getting it done. Inspiration gives freedom of thought, creativity and the possibility to think "out of the box". Whereas students often associated concentration with the university library, they gained inspiration elsewhere. The theme *safe and extraordinary* refers to the courage to try new things. In the beginning it is important to have "a license to make mistakes", and for that you need a basic sense of security. Students felt that in the school environment you are able to try new things through trial and error. Pushing oneself to the limit and leaving the comfort zone means trying something extraordinary, such as doing a trainee program overseas.

These themes form a creative and effective learning environment. It is argued that a learning environment that uses these different aspects is holistic and supports the experiential learning cycle (Kolb 1984). However, even if the learning environment can be created and enhanced by the teacher, the atmosphere and social capital are also dependent on the student group and outside partners taking part in the course. The social capital and ownership of the learning environment are re-designed every time a new student group starts to work. That is why the learning

environment needs to maintain flexibility over time; it should allow different learning, working and teaching styles to flourish.

The focal contribution of this essay to the marketing education literature is the understanding of different facets that form a holistic learning environment. The essay provides suggestions on how those can be used in the development of learning environments that support students' learning processes.

Examples of the two collages made by students are in Appendix 5.

[This essay is published in the Asia-Pacific Advances in Consumer Research (Jaskari 2013).]

### 4.3 Teaching the fuzzy front end of innovation: real life application with cross-functional and international teams

The successful launching of new products in the marketplace is vital for the long-term survival of companies (Cooper 1993). Product life cycles are becoming shorter, leading to fast-paced changes in the technological and competitive environment and in customer needs and wants. There is thus a strong need for companies to ensure the effectiveness and success of their product and service innovation processes (Herstatt & Verworn 2001). Moreover, researchers have shown that organizations that excel in the very early phases of product development, i.e., the fuzzy front end, are more likely to succeed in product development (Murphy & Kumar 1996; Kim & Wilemon 2002). Aligned with this, Koen et al. (2001) suggest that the fuzzy front end of innovation presents one of the greatest opportunities for improving the overall innovation process.

Graduate students all over the world are taught about product development, but the uncertain early phases of innovation have only recently started to receive attention (Martinsuo 2009). This paper aims to fill this gap and attempts to develop and test course structures to suit the complex nature of the fuzzy front end and to shed light on the student learning experiences in a cross-functional service concept development course in an international context. The paper adopts an experiential learning perspective and relies on real-life experiences, students' error and trial processes, conceptualization and reflection of learning.

The pilot courses emphasizes the typical characteristics of the fuzzy front end by including the early phases of the product or service innovation process, by relying on user-centered knowledge throughout the process, by including opportunity



identification and analysis, idea generation, evaluation, and selection, concept definition and development, and strategic business planning, by being at least partially a structured and systematic process, and by using cross-functional and even international teams.

The results reveal student learning outcomes on practical and theoretical understanding of concept management, new innovative methods in concept development, teamwork skills, project management skills, presentation skills, cross-cultural understanding, and development of professional identity.

The focal contribution to the marketing education literature is the description of two different course structures in international cooperation and student experiences of them.

[This essay is published as a competitive paper in the Proceedings of the Annual Conference of the Academy of Marketing Science 2012 (Jaskari 2012).]

#### 4.4 Making sense of marketing students' professional identity construction through a multidisciplinary project course

Professional identity is a central theme in career literature (Ibarra 1999) as career success is often associated with successful professional identity construction (Slay & Smith 2011). Marketing is a complex profession as different kinds of education may develop the skills needed in various jobs within the multifaceted marketing field. Thus it is interesting to understand how marketing educators can support the construction of the students' professional identity already during their studies.

This essay aims to analyze how marketing students make sense of their professional identity during the multidisciplinary service concept development course.

The theoretical discussion on the construction of professional identity is based on social identity theory and the identity process's guiding principles of distinctiveness, continuity, self-efficacy and self-esteem (Breakwell 1986, 1992).

The qualitative data is gathered from a university-level international project course, where Swedish design and Finnish marketing students worked on developing a new festival concept for the city of Vaasa, Finland. The data consists of feedback forms from both design and marketing students and learning diaries where sixteen Finnish marketing students wrote about their thoughts and feelings

about a multidisciplinary learning context. The data is analyzed using qualitative content analysis.

The results show how students use the principles of identity construction in making sense of their own profession, both now and in the future. Professional identity evolves in interaction between one's own profession and other professions and the knowledge and skills needed in one's own profession become more evident. The paper presents practical implications for how educators can enhance professional identity development among students.

The focal contribution of this essay to the marketing education literature is to shed light on the ways in which the students construct their professional identities during their studies and how teachers can enhance the individual construction process.

[This essay is published as a competitive paper in the Proceedings of the 16th Annual Conference of Education, Learning, Styles, Individual Differences Network in 2011 (Jaskari 2011).]

#### 4.5 The challenge of assessing creative problem solving in client-based marketing development projects: A SOLO taxonomy approach.

Marketing is a creative process that creates new products and services, develops pricing and channel strategies, and uses branding to enhance the customer relationship. Marketing involves doing things differently, combining old things with new ones, innovating, surprising, and delighting. Indeed, creativity and marketing imagination are essential core competencies for marketers.

Creative problem solving needs to be emphasized in the teaching of marketing (Vogel, Cagan & Boatwright 2005) and, indeed, it has already been recognized as an important learning objective and tool in marketing curriculums. Many creative methods are used in marketing education even though there are still concerns about whether marketing faculties formally encourage, recognize, develop, and reward creativity in marketing students (e.g., Lunsford 1990; Ramocki 1996; Titus 2000, 2007; McCorkle, Payan, Reardon & Kling, 2007; Strauss 2011). However, no systematic efforts to assess creativity or creative problem solving in a marketing education context have been published to date, even though their importance has been noted (McCorkle et al. 2007).

To fill this gap, the aim of this essay is to analyze the SOLO taxonomy as an assessment tool in creative problem solving and to develop an assessment framework by contextualizing the SOLO taxonomy for client-based marketing development projects.

The SOLO taxonomy (Structure of the Observed Learning Outcome) describes how the learner's performance grows in complexity when mastering academic tasks. It is a method that encourages higher cognitive outcomes (Biggs & Collins 1982; Leung 2000).

SOLO taxonomy is used to analyze the outcomes and development processes of six student projects that were conducted in the Concept Factory. The outcome was analyzed in terms of its novelty to the market and the targeted customer group (high, medium, low), usefulness to the client (high, medium, low), and the structure of the concept (SOLO levels, the simplicity or complexity of the presented solution, and how well the solution fit the problem).

The development process was analyzed by using the elements of the SOLO taxonomy, namely capacity (how much time and energy was used for the solution, both thinking and doing, creative and critical), relating operation (how well the students acquired new data and used it in constructing their solution), and consistency and closure (how the group dealt with inconsistencies and uncertainty and whether they took their time or aimed to close quickly).

Based on this analysis an assessment framework for creative problem solving in client-based marketing development projects was developed. Finally, suggestions for teachers on how to enhance creative problem solving and its assessment in marketing classrooms were given.

The focal contribution of this article is the understanding of assessment focusing not only to the outcome but also to the process of the client-based project work. The proposed assessment framework serves as a tool for marketing educators for creative problem solving.

[This article is published in the Journal of Marketing Education (Jaskari 2013).]

## 5 MANAGING TEACHING IN CLIENT-BASED MARKETING DEVELOPMENT PROJECTS

The three empirical objectives are addressed in this chapter. The first objective is to model a holistic teaching process. This model is a chronologically phased illustration of different aspects that the teacher needs to manage. It applies the principles of constructive alignment to tackling challenges in developing marketing knowledge and skills in client-based development projects.

The second objective is to identify complementary and competing challenges faced in different phases of teaching. These critical tensions illustrate how teachers must choose and balance between different aspects as well as the trade-offs that they have to make between different options depending on what they want to emphasize. The different ways of managing these tensions illustrate the large variety of potential projects and the scope of course management. These critical tensions are team composition, challenge level and supporting processes.

The third objective is to analyze typical project paths that lead to either successful or unsuccessful project output. Further critical stages within processes are identified in order to suggest how to overcome the critical incidents and thus manage the processes of client-based project work.

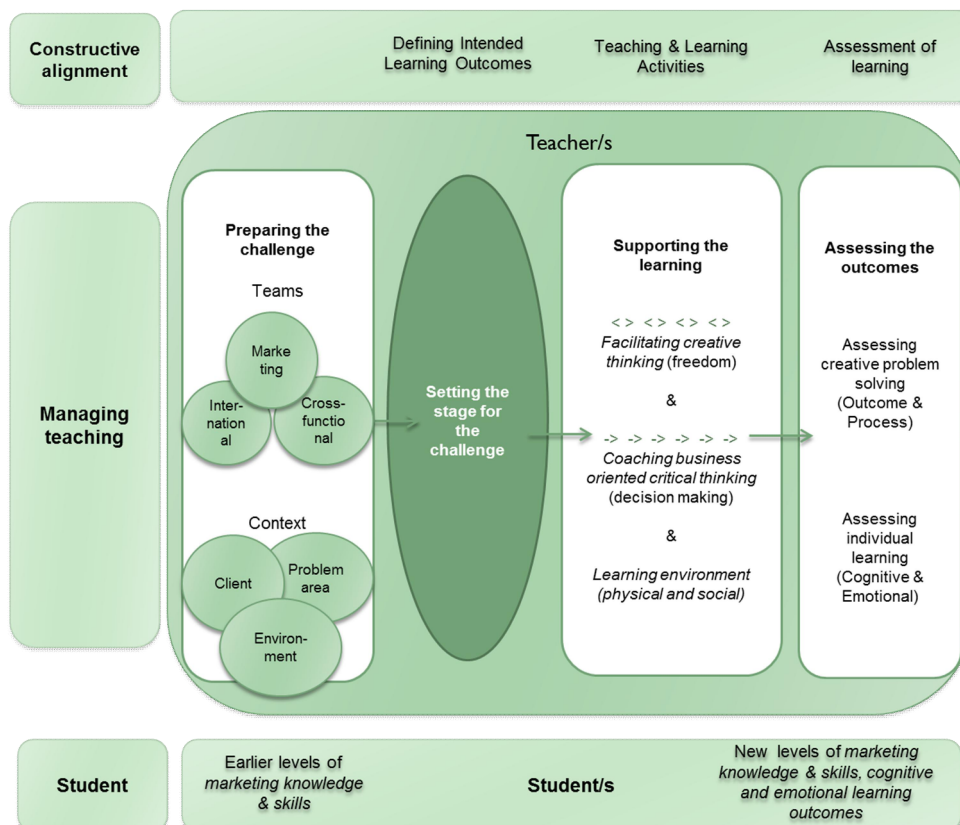
Together, these models yield a holistic understanding of different challenges and decision-making points that teachers face in course management.

### 5.1 A model for a holistic client-based teaching process

This holistic model is a chronologically phased illustration of different aspects that the teacher needs to manage. The framework of constructive alignment forms the basis for the concept, including the intended learning outcomes, planning and managing the teaching and learning activities and assessing the learning outcomes as pictures in the uppermost rectangle in Figure 5.

The individual student's learning is pictures in the lowest rectangle. The student's earlier knowledge consists of the substance areas he or she has studied and his or her understanding of different concepts, structural frameworks, strategic principles, empirical generalizations and research principles (Rossiter 2001). Typically, in our projects these included the understanding of brand management, business relationships, product development processes, consumer behavior, and research

methods. However, the model doesn't restrict the knowledge areas and other knowledge areas could be used as well. The students' level of knowledge (both earlier and intended) sets the boundaries for what kinds of projects can be planned. In our case, the expected background knowledge includes topics covered in a bachelor's degree in business administration. The aim of a master's degree is to build critical thinking skills and a more comprehensive understanding of the complexity, relativity and context dependency of marketing knowledge. It is expected that the students will deepen their knowledge during the development project, as they need to apply the knowledge to the given situation. They will gain procedural understanding of how to apply marketing knowledge and this will deepen their understanding of the challenges, boundaries and constraints of that knowledge and thus lead to better understanding of different forms of marketing knowledge.



**Figure 5.** A holistic teaching process for client-based marketing development projects.

By applying their knowledge, the students increase their skills in different areas such as practical application, creative problem solving, teamwork, and communication. Also, the students can improve their self-reflection skills by keeping a learning diary. Many of these skills are general and transferable in nature but they

become marketing-specific when they are brought to the marketing context. Marketing knowledge and skills play a key role throughout the project; they affect different phases of the development project and they set the focus and boundaries for course management.

The middle rectangle represents the management of student learning. This is divided into several phases: preparing the challenge, setting the stage for the challenge, supporting the learning and assessing the outcomes. In this study the specific context is the early phases of product and service development, the fuzzy front end.

### *5.1.1. Preparing the challenge*

In the preparation phase, the teacher sets the scene for the development work and considers what kinds of teams and what kinds of contexts would be best suited to the intended learning outcomes.

#### *5.1.1.1 Preparing the teams*

Preparing the teams refers to the intended levels of cross-functionality and internationality in the teams. A functional group consists solely of marketing students. Even though the students differ in terms of their background, they have a similar starting point because they are majoring in marketing. All these students are familiar with the basics of marketing knowledge – the concepts, frameworks and principles. Sometimes they share such similar views that they do not engage in any critical thinking about how the things are done.

The teamwork challenge level can be increased by introducing team members representing different professions to the project work. Cross-functional teams consist of students from different functions, for example marketing, design, communication and/or industrial marketing. Cross-functional teams may consist of members representing two or more different functions. The clients' problem area and development context guide the choice of different functions. For example, if the project is expected to produce visionary prototypes, design students can be brought on board. If marketing communication concepts are expected, communication and language students can be integrated into the team. If the order-delivery process is expected to be re-engineered, production engineers can be integrated.

Cross-functional cooperation poses a number of different challenges. First, the ways of thinking may vary between professions: for example, designers take a

broad, exploratory and visionary approach to thinking, whereas many marketers are more analytical and goal- and business-oriented. Indeed, as Holm and Johansson (2005) have pointed out, marketers and designers working together run into difficulties before they find a mutual understanding. There can also be similarities between functions: for example, marketers and communication students both have a similar perspective on communication and this lays common ground for their teamwork. The following case illustration describes the cross-functional teamwork challenge.

In service design projects, designers and marketers were combined to create innovative new service concepts for a city (Future Fair and New Festivals in Vaasa 2010). The course integrated cross-cultural cooperation with many different nationalities as well as cross-functional designers and marketers. Some groups worked well, but some groups faced many challenges due to cultural differences. As the focus had not been on cross-cultural aspects, only a little guidance was provided on those aspects. Some groups lost too much time struggling with their teamwork. These difficulties should have been anticipated earlier. (Case illustration)

Professional differences may stem not only from individual differences but also from educational differences as discussed in the Essay 3. The way in which the students are taught and mentored to adopt their professional way of thinking affects how they work. Indeed, this is obvious in the differences between individuality-centered, project work-based design education and lecture-based and discipline-based marketing education. The different educational backgrounds thus set expectations towards the teamwork.

Yet another aspect that increases the challenge level in teamwork is the cross-cultural aspect. As modern business is international or even global, cross-cultural teams enhance the experiential development of cross-cultural skills. International students may introduce new insights, new approaches and viewpoints, thereby helping the team to see the problem from different perspectives. Cross-cultural teams may consist of two or more nationalities. Differences between different cultures provide endless possibilities to challenge the students, as such differences affect the group dynamics. However, there is a risk that cultural differences can lead to too many difficulties that affect the project work.

The most challenging level of teamwork is expected when combining cross-functional teams with cross-cultural teams. Then the teamwork is affected both by differences in professional thinking and by cultural differences.

### 5.1.1.2 *Preparing the context*

The *client* refers to any organization or part of it that cooperates with the course. Those can be small, medium-sized or large companies, both local and global, different kinds of governmental organizations such as development agencies or hospitals, or third-sector organizations such as sports clubs or charities. Marketing knowledge is applicable almost everywhere. The students appreciate real-life clients and get a motivational boost if the client actually takes part in some workshops or meetings. Sometimes it is enough that a person from the company visits a class to make it a real-life case.

The client can be acquired by the faculty, teacher or by students themselves. However, not any client will do, as the client and the development challenge have to be a good fit for the intended learning outcomes (Goodell & Kraft 1991). The environment must be suitable for enhancing the practical use of knowledge and the development of the intended skills. The challenge, the actual project brief, needs to be negotiated to the intended level.

Often the client's expectations regarding cooperation are fuzzy. The client is not really certain what to expect. Thus it is crucial to negotiate with the client about what it will gain by working with the students. Students are not consultants or professionals yet, and the main focus is on the development of students' learning. Also, the cost for the client is typically far lower than when using consultants or research agencies. Indeed, in most cases, the client gains ideas that challenge the company's in-house thinking and give food for thought. Sometimes the client also gains applicable solutions or even usable concepts. Sometimes the students are not as motivated as one would hope and the results may lack rigor. A simple three-stage method to negotiate the objectives with the client is described in Appendix 1. Also, Lopez & Lee (2005) provide hands-on guidance on how to choose and prepare clients for client-based courses.

There is a need for clear commitment from the client. The client transfers tacit knowledge on how to behave in marketing development projects. If the client is motivated, the students feel that their work is important. However, if the client shows that the project is not so important, for example by accidentally saying that it does not really matter what the students do, the students' motivation suffers greatly. This study suggests that the client-student relationship is very important and sensitive and thus the teacher should focus on those clients that are willing to invest their time and motivation into cooperating with students.

How many clients should there be? Should there be one for each student team, one for a couple of student teams or one for all student teams? In



some courses, we have had one client for each pair of students, resulting in 12 cases in one course. Some of these were acquired by the teacher and some by the students themselves. In some courses we have had one client for a group of four to five students and in some cases we have had only one client for the whole group of 25-30 students. If each group has its own case and client, the group members need to keep in contact with that client on their own and take responsibility for the cooperation. Thus, it is useful for students to acquire their own clients, as this gives them a greater sense of responsibility for the project. However, some students have a very difficult time trying to find suitable clients and sometimes it is hard to control the level of the cases. Also, for the teacher it is challenging to guide several different cases throughout the project work. (Case illustration)

This study suggests that having only one client for the whole group is useful for several reasons. First, it is easier to negotiate with only one client and come to an agreement on what will be done. One client also means that there is an opportunity to share knowledge throughout the project. For example, several groups can carry out trend, competitor, market and customer analyses using the same data. This makes it easier to manage the starting point and understanding of the phenomenon. This can also build up the social capital of the whole student group. Third, it is a learning experience for the students to understand that one starting point may result in several different outcomes. This also emphasizes the complex, context-dependent and relative aspect of marketing as professional knowledge.

However, if the teacher wants to have several clients or maybe encourage the students to acquire the clients on their own, it is suggested to keep something else as a constant in order to manage the fuzziness. A constant may well be an industry in question or the focus of development, such as brand building. This can also lead to discussion on different solutions to that constant, which again emphasizes the relativity and context dependency of marketing knowledge.

The *problem area* refers to the focus of the development work, that is, what actually needs to be developed for the client. It refers to the substance area, i.e., the marketing knowledge. A variety of different problem areas are available for marketing development projects. Product development, brand identity, product profitability, sales management, customer relationship management, marketing communication and distribution provide problem areas for the context, whether as the core topic or part of a larger and more holistic marketing concept. For example, a company might have a problem with its branding and thus the project could aim to develop a new brand identity for the client. The students may use theoretical knowledge on branding to approach the problem. The problem areas vary from abstract and strategic to more concrete and operational. Some problem areas are more interesting for the students than others.

The problem area suggests what kinds of theoretical marketing knowledge can be used when doing the project work. However, sometimes the problem area may be left very open – even so open that the students first need to identify the client's main problem and then determine on their own how they want to approach it.

The *environment* refers to all the external contextual factors that affect the client and its business such as political, economical, social, technological, ecological and legal trends. Students might find it harder or easier to grasp different industries. For example, the fast-moving field of consumer goods provides a more familiar starting point for the students than business-to-business environments. Traditional industries such as shipping are easier to understand than innovative new fast-changing industries such as IT gaming. The phase of industrial maturity, the nature of competition, the changing customer wants and needs, and the speed of change affect the complexity of the industry. Further, local, international or global industries set less or more of a challenge for understanding the environment. In other words, the students need to understand the playground where the client is playing at that moment – or understand the strategic question of how to change the game.

To summarize, the teacher needs to decide on different aspects on the team and the context based on the intended learning outcomes.

### 5.1.2 *Building up the challenge*

All of the aspects described above have an impact on how to build up the challenge for the students and how to structure the assignment and thus the course outline. There are two major decisions that affect the complexity of the challenge. The first is to decide on the starting point or the problem area. How clear or fuzzy is the problem area? A clear problem area implies that it is easier for the students to understand the problem context, enabling them to define the problem for the project work. A fuzzy problem area includes the description of context, but leaves open the problem formulation. As Schön (1983) notes, it is critical for a professional to be able to define the problem before solving it. The students are expected to first define the problem and then to start working on it. This aspect focuses more on developing the skills to understand the context and formulate the problems.

In the case courses, the students were given a clear project brief for the case of Stundars (2012 – 2013), in which the students were asked to develop marketing communication concepts. Then again, in the cases of the Future Fair and New Festivals in Vaasa (2010) the students were merely given a context and some ideas for a starting point. (Case illustration)

The second decision concerns the expected outcome, the goal specification. At one end, the expectations can be concrete and closed, such as practical suggestions for the client. At the other end are more abstract and open goals where the students may be expected to come up with concepts that can be visionary and innovative, but not yet applicable or pragmatic.

In the case courses concerning the Regional Council of Ostrobothnia (2011) and Stundars (2012), a concrete goal specification was used. The students were expected to come up with marketing communications concepts with practical plans and budgets where the costs were based on several offers requested from various suppliers. In the case of New Festivals in Vaasa (2010), design and marketing students worked together in the early phases to come up with three innovative concepts that did not have to be practical at that point. (Case illustration)

The teacher has to decide on the problem area and goal specification aspects and balance between them. This can be described using two examples. The first is a clear, closed assignment and the second is a fuzzy, open assignment.

One of the cases in the early years of our course (2008) is an example of an assignment with a clear problem and closed outcome expectation. This case involved a customer survey. A client asked the student group to carry out customer research and develop new target group-specific marketing concepts for the client. The client was enthusiastic about working with the students and kept in close contact with them. The client was ready to answer all the questions that the students had in mind. However, this led to a situation where the client was running the project. The project became a limited customer satisfaction survey where the students merely did what the client asked them to do. They even had to copy-paste email addresses from one file to another. Clearly the assignment did not fulfill the aim of enhancing creative problem-solving and was not challenging enough. However, even though the project was not successful from the faculty's point of view, the students enjoyed it. They were always fully aware of what they were expected to do. The project was clear and concise but the students did not need to grapple with their understanding of the context or problem formulation and they were not able to use their imagination or creative skills. (Case illustration)

An assignment with a fuzzy problem area and an open outcome expectation leave the door open to many different options and the first challenge is to try to understand the problem. An extra challenge is posed if the client and its industry is stable or in change. This resembles real working life, where it is uncertain what the problem is and how it should be approached. At the same time, this leaves more room for creative and innovative problem-solving processes and outcomes. The students may come up with completely different kinds of solutions than what the

teacher had thought up. This again enhances the learning of context dependency and complexity. However, the uncertainty involved in this may be very stressful for the students and the teacher needs to support the learning process.

The fuzziest and most open assignment was a course run with an international student group, the Future Fair (2011). All of the 30 students were given the same problem area as a starting point: “what would the future fair look like?” During the development process, six groups created different concepts. The open outcome expectations resulted in innovative concept ideas that were more or less practical. For example, some of the most visionary concepts included ones in which the fair was built up in the trees or included floating ferries that could be moved along the coastline cities. (Case illustration)

All in all, it is suggested that clear, closed assignments can be useful in early years of education, when students can familiarize themselves with professional practices. However, in later years the assignments should reach a fuzzier and abstract level in order to resemble actual business life in all its complexity, fuzziness, relativeness and context-dependency.

### 5.1.3 *Supporting the learning process*

Active and responsible students need hardly any guidance during their project. They set their own problems, are eager to find information from different sources and challenge themselves to find solutions for the client’s problem. They are self-directed and goal-oriented. However, most students prefer to have guidance throughout the project, sometimes to support their own thinking, sometimes to get direct instruction on what to do next. Supporting processes provide formative feedback for the students and engage them in trial and error processes.

There are several possible choices for who guides the processes. In Concept Factory, there is most often one or more teachers who run the project and guide the processes. However, peer feedback also serves well in stimulating thinking and thus facilitating the creative process as well as in making decisions, thus resembling the coaching process. Concept Factory has also brought in professionals from business life to give feedback based on their special expertise.

In the beginning, it can be a challenging task to motivate the students to put their hearts and minds into the client-based development work. At that time, the project is just “more schoolwork”. However, at some point, the ownership of the project is transferred from the teacher and the school to the student group. This is a very interesting point after which the role of the teacher changes. Quite often the phase

of gaining customer insight, digging into the real-life case, serves as a watershed for ownership – the students become motivated and gain deep understanding of the project and this shifts the ownership to them. They become professionals or specialists on their own data and project. Over the years, some student groups have even become emotionally involved with their own project, explaining later how frustrated they felt if someone did not understand the beauty of their idea. Also they may explain that they dream about the project or find themselves thinking about the project in the evening or when shopping. Indeed, some students are deeply involved in the process.

During the research time, different types of supporting processes were used. Eventually, I have come to the conclusion that the teacher needs to balance two competing and complementary guiding processes. The first is a facilitating process, where the teacher aims at enhancing unconstrained, imaginative and visionary thinking. The second is a coaching process, where the teacher aims at enhancing critical, business-oriented thinking. The names of coaching and facilitating processes refer to different roles required from the teacher. Also, they emphasize the power position as discussed in Essay 1. Both positions aim to support the learning and emphasize students' active as independent learners, responsible for their own learning and accomplishing the development task. This is why for example specialist name is not used.

The two processes resemble lateral and vertical or parallel thinking as discussed by deBono (1970). The facilitation process pushes the students to use their lateral thinking skills in a generative process that includes making side steps and finding perspectives one could not imagine at the beginning. The coaching process pushes the students to use their vertical thinking skills in a selective process, working in a sequential way following a predefined logic (deBono 1970: 8; Tassoul 2009: 63).

#### *5.1.3.1 Facilitating the creative process*

Facilitating a creative process means that the teacher enhances the creative environment, fosters cognitive flexibility and supports working in an area of uncertainty. The process helps the students to think out of the box, to let go and to bear uncertainty (Titus 2000, 2007). This is difficult for the students and needs to be facilitated by means such as creating a trusting atmosphere, bringing in creative tools and pushing the students to think from different angles. As Titus (2007) notes, one of the biggest challenges for educators is to motivate the students to tackle challenging creative problems that require a lot of time, effort and energy.

Facilitation process has evolved during the action research time. In the beginning the students were merely asked to be creative and come up with

new solutions. Later, specific idea generation methods were included and finally creative workshops has been organized. These workshops have been tied into overall development processes and thus the creativity has become part of everyday development. Facilitation aims at supporting the students' creative thoughts. A landmark for this change was the projects with Umeå Design Institute. In the first project students used creative methods throughout the course time and in the second project the students conducted together creative workshops based on the ideas of design thinking (Brown 2008) and idea agent (Michanek & Breiler 2009). Later, the creative workshops have been included in different phases of the overall development process. For example, after an extensive customer research, a "customer profiling" -workshop has been organized and the students have constructed user profiles based on their findings and their imagination. Students are also encouraged to use more creative tools and techniques throughout the development process. (Case illustration)

#### 5.1.3.2 *Coaching the business-oriented critical thinking process*

The second process involves coaching the business-oriented critical thinking process. The coaching process refers to a business-oriented problem-solving process that helps the students to reach the goal and produce solutions that are both valued by the market and profitable. This process emphasizes, for example, earlier knowledge, goal orientation, effectiveness, useful solutions, keeping to timetables, and documenting what has been done thus following a sequential logic (deBono 1970: 8).

Coaching is based on processes used in business development in general. The aim is to enhance the business-oriented critical thinking and bring marketing knowledge alive. Earlier years the students were able to choose they process, and then most used basic development process. The role of the coach was to support the learning towards their goal using the chosen process. Also, the teacher used different kinds of the roles depending on the phase of the project. However, it seemed that many of the projects lacked depth and specific marketing knowledge. Thus in the later years the process has been chosen for the students based on the client's development problem. The coaching has focused more in each decision making points within the chosen process. (Case illustration)

It is suggested that the teacher needs to balance between the two complementary support processes. The balancing depends on and is relative to the team composition and challenge context.

#### 5.1.3.3 *Enhancing the learning environment*

The physical classroom, clients' premises and customers' homes represent parts of the physical learning environment where the learning takes place. The learning

environment is here understood in broad terms, including the internal, external and virtual learning environments.

The Essay 2 proposes a safety net as a metaphor for a creative and effective learning environment. Business and pleasure, I and others, concentration and inspiration, and safe and extraordinary illustrate the facets that the teacher can stimulate when constructing the learning environment. The safety net metaphor emphasizes a safe environment that enables the students to slide into creative, unconstrained trial and error processes, where they let go as well as engage in more critical, goal-oriented and effective decision-making processes.

The learning environment as a whole should support learning by building an environment where the students feel safe and motivated to engage in trial and error processes that are needed in creative problem-solving processes. The physical learning environment as one instance of the external learning environment can be used in many ways to support this learning. The typical classroom environment enhances habitual classroom behaviors. Indeed, it is suggested that in order to break formal ways of thinking and acting, the teacher may use different learning environments to stimulate new ways of learning.

During the first year Concept Factory took place in the university premises, but all the student teams visited the client with the teacher at clients' premises. This was done in order to enhance the feeling of working with real-life clients and do something differently than what was the usual way of doing. For many years Concept Factory took place in a nearby design center as there were wishes for closer cooperation with design. Lately Concept Factory has taken place in the new innovative learning environment that has been built inside our university. In the new learning environment the facets of safety net has come alive. (Case illustration)

It is also suggested that client's premises serve as a good place to break habitual classroom behaviors and enhance experiential learning through concrete experience. Often the student group visits the client in order to gain a deeper understanding of its business, context and surroundings.

Also, in order to gain a deep understanding of the customers and their behavior, it is suggested to experience firsthand the customers' environment, such as their homes, everyday activities, and touch points with the service providers. In this way the students gain better understanding of how the products under development may provide value for customers (Boyd & Levy 1963).

#### 5.1.4 *Assessing the learning outcomes*

The assessment of client-based projects has not been well researched in the marketing education literature. The assessment of the students' learning in this concept is twofold.

First, the project work, its outcome and process are assessed. The assessment framework for creative problem solving is developed in Essay 5 (Jaskari 2013). Based on that framework, the outcome is assessed in terms of its novelty to the market and the targeted customer group, usefulness to the client, and the structure of the concept. The development process was analyzed by using the elements of the SOLO taxonomy, namely capacity (how much time and energy was used for the solution, both thinking and doing, creative and critical), relating operation (how well the students acquired new data and used it in constructing their solution), and consistency and closure (how the group dealt with inconsistencies and uncertainty and whether the students took their time or aimed to close quickly). To demonstrate the analysis, a detailed description of six final concepts from the autumn of 2012 and an evaluation of the outcome and development processes are presented in Appendix 2.

Second, the experiential learning theory emphasizes students' self-reflection. Thus the assessment has looked into self-reflection through learning diaries.

Each year the students have reflected on their learning through learning diaries. They have been advised to write diary entries regularly, after each session. In earlier years some students took this advice and really put their minds into keeping a diary, but some left the writing to the last minute, filling in the diary only a couple of nights before submission. In later years, there has been more control; the students are asked to submit their diary every week or every other week so that they have time to reflect on their thinking. The guidelines for the diary have suggested that the students should use descriptive, analytical and critical reflection according to Levander (2002). Learning diaries have been evaluated as pass/improve/fail. However, to make the diaries more valuable for the students, they are told that their learning diary can affect the final grade by plus or minus one point. Every year, some students have been rewarded for very good work, while some have lost one point because they did not complete their learning diaries properly. In general, the quality of the learning diary matches the standard of the group work. In earlier years, the learning diary was just part of the overall amount of study points. In later years, the importance of the learning diary has been emphasized by giving two credits for the learning diary. (Case illustration)

The level and depth of the learning diaries vary between students. Some students write mostly in a descriptive manner; they show what they have done in the pro-



ject. Most students are able to analyze their own activities and thinking as well as the group work. Not all the students manage to engage in critical reflection, where they aim to take all their learning to a higher level and think about how what they have learned has changed their way of thinking. Some learning diaries are filled with neat, even shallow descriptions, while some include very deep and open discussions about personal development.

When reading the learning diaries, I sometimes get a feeling that I am reading a personal diary. They are so open, so critical, so thoughtful. It feels as though they are not meant for the teacher at all. In that regard, the learning diaries can be sensitive and powerful. (Case illustration)

Indeed, it is suggested in the Essay 3 that the learning diaries are useful in developing a professional identity.

The reflections on learning indicate both cognitive (knowledge and skills, thinking and doing) and emotional (feeling and reflecting) learning outcomes. The deeper knowledge refers to a more holistic understanding of theoretical constructs and the deeper skills involved in their use.

When I think about my learning, the thing that is at the top of my mind is a holistic picture of concept management. In my opinion, this kind of practical project is a lot better for learning than theoretical courses. [...] The second learning point is the emphasis on customer orientation. In concept management you need to understand your customer. So often you just take some things for granted. [...] The third important learning point for me is the improvement in presentation skills, including the preparation of presentation materials. (M2/2012)

However, sometimes the individual experience of learning differs from what had been set as the intended learning outcome. Even if the generic learning objectives refers to client-based project work, in the following extract the student feels the main learning comes from other matters. This is the power and risk of experiential learning.

The three most important learning points for me were better self-understanding, holistic understanding of concept management and experiences of working and decision making under uncertainty. (M3/2012)

Based on the theory of experiential learning, learning requires the resolution of conflicts. It can be a struggle for the students. Indeed, the learning outcomes include not only knowledge and skills, but also feelings and emotional outcomes.

The most important learning point for me is that during the course I have started to believe and trust in myself. Sometimes I can do something I have

not done before. [...] The second learning point for me is that you don't always need to work in the same group; you can succeed in a new and different group. [...] The third learning point for me is that you need to concentrate on what you and your group are doing, and not think about what other groups are doing. (F2/2012)

The emotional outcomes are evident throughout the course. The learning diaries also include several stories about frustration, uncertainty and other emotional challenges.

On the whole the course has been a very educational experience for me and it has provided me with several moments of tears and laughs as well as feelings of disappointment and accomplishment. (F9/2012)

Sometimes the students experience very strong feelings. Common positive feelings include a sense of accomplishment, self-assurance and success, leading to better self-esteem. The students are happy after completing the course, describing it as a whole lot of work, but worth it. The group has built high social capital; they have close relationships with each other and they even organize parties or study trips at the end of the course.

During the course I have felt storms of feelings. The teamwork has sometimes felt exhausting and wearing and the workload too big. However, now that it is all behind me, my memories are becoming gold-plated. It has not been easy. I am now happy about everything that we accomplished. It was an unbelievable feeling to present the concept we had been working on all autumn. I was especially proud of our team when we finished the report and completed its final visual design. That was the moment we had all been waiting for so much. (F6/2012)

At the other extreme, this way of teaching can be stressful, even overwhelming for the students. Common negative feelings include frustration and fatigue, even anger. This is typical in cases where the students have to deal with too many challenging aspects at the same time. For example, an international context, multicultural and virtual teams and a challenging project brief may be too much for them to tackle.

In my opinion our project work was one creative process with ups and downs. Each part of the assignment felt challenging and made us feel uncertain. Fortunately we also experienced success. However, that positive boost was short-lived. The next assignment made us feel uncertain again. Accomplishing the project required mental growth – and this also meant that in the end we were able to make a decision on the final concept. (F1/2012)

Cross-functionality could also have affected the group work negatively. In our group work, the negative impact was only slight, as the different func-

tions were unbalanced in their theoretical understanding of concept management. We marketers sometimes became enthusiastic about different theoretical models and used those to advance the project work. However, we sometimes forgot to tell the other team members about these models. Sometimes I felt sad, as I felt we didn't treat everyone equally. Thus, in some instances, cross-functionality may split the team by separating the group members apart from each other. (F9/2012)

The students and teacher(s) work very closely during a period of four months. The students get to know each other and the teacher quite well. A feeling of familiarity develops. This also enhances the possibility to give feedback that is emotional, both positive and negative. In general, the students find client-based projects heavy and exhausting, with a very high workload. The way of working is different from the other courses they have completed. As most of the studying is practical doing, it becomes obvious to the students how much time they spend in order to complete the task. Often they also seem to expect higher marks since they have done so much work. Also, complexity and uncertainty spark feelings of insecurity. However, as many of them wrote in their diaries, they consider the course to be not only demanding, but also rewarding – when they give a lot, they also gain a lot. This is evident in one of the formal anonymous feedback letters received in 2012–2013:

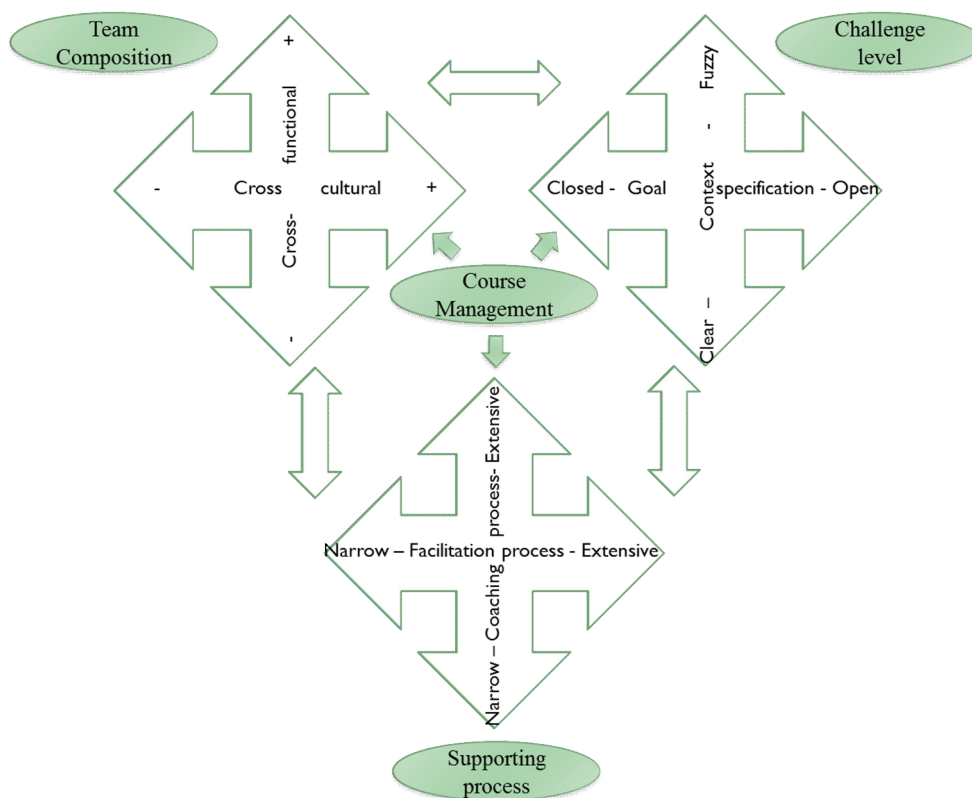
I have mixed feelings about the course. On the one hand, the course was extremely educational and practical, which is sometimes unusual at the university. On the other hand, the course instructions were unclear right from the beginning. For example, it was not clear how many study points you can get or how to do the group work. The course required a tremendous amount of work and the tight schedule made it harder to complete other courses. Even though there were not so many lectures, the group work required constant attention. Because of this, the fact that the course ran all autumn was problematic; even though it gave 12 study points, it was only one third of all my study points from the autumn. Most of the workload, however, was for this course. However, the course was very interesting and educational, even though it can be improved. In my opinion, it is extremely positive that there are courses at the university where you can do something practical based on the theories you have learnt, and not just hunker down in the middle of piles of books. (Anonymous feedback 2012–2013)

The learning outcomes described above – knowledge, skills and feelings – highlight how holistic concept the experiential learning is. From the teachers' perspective, the aim is that the feelings turn into learning outcomes that can be both positive and negative. Even if the teacher needs to focus on intended learning outcomes that are measurable, it should be noticed that a great range of other learning can also be gained.

## 5.2 Managing the critical tensions in course management

The model of a holistic teaching process aims to give a big picture of different aspects that need to be considered when managing client-based marketing development project courses. The second objective of this dissertation is to identify critical stages and tensions within that the teacher needs to make decisions about in order to balance between them.

Three critical tensions can be identified: creating the team composition, deciding on the challenge level and balancing between support processes. Each of them involves tension between two facets and it is suggested that the teacher needs to decide on how to balance the tension between the facets. The critical tensions are presented in Figure 6.



**Figure 6.** Critical tensions in course management.

*The team composition* involves tension between cross-functional and cross-cultural facets. Low cross-functionality refers to a functional group, such as marketing students. High cross-functionality refers to a situation in which several

other functions are members of the team, such as designers, engineers and marketers. A low cross-cultural aspect refers to students from the same national culture, such as Finnish students. A high cross-cultural aspect refers to students from different national backgrounds and cultures. This tension reflects the challenges faced within the teamwork. In a case where there is a functional and national student group such as Finnish marketing students, the group members face fewer challenges in the teamwork as they have similar views on the underlying discipline and culture. They still face difficulties due to individual differences, but do not have to deal with difficulties arising from cross-functional or cross-cultural aspects. At the other end is a case where there are cross-functional teams with students from different countries. The challenges they face arise both from the different ways in which the team members look at things based on their education, which is obvious for example between marketers and designers, and from their different cultural backgrounds, such as Finnish and Chinese students.

*The challenge level* involves tension between the problem area and outcome expectations. Together these relate to the scope of the assignment. A fuzzy problem area refers to a context description where the students start to work out the problem, whereas a clear problem area refers to the specified problem to be solved. An open goal specification refers to innovative concept-level outcomes that may be more visionary than practical. These goals are used to inspire and challenge the client's thinking. A closed goal specification refers to a practical application for the client that can be very concrete, such as a specified marketing plan or radio advertisement. Sometimes the client can use these materials in its real-life marketing.

The tensions involved in creating the team composition and deciding on the challenge level are issues that the teacher has to deal with when planning the course. These needs to be considered simultaneously as certain clients' problems may require specific knowledge and skills such as marketing, design or engineering.

*The supporting process* involves tension between the facilitation process and the coaching processes. The decisions made earlier on team composition and challenge level affect the emphasis on the supporting process. If the team consists of design and marketing students, the designers enhance the creative process. Thus the supporting process may emphasize the coaching process in order to enhance the students' business-oriented critical thinking. On the other hand, if the team consists of engineers and marketers, their analytical and critical thinking is enhanced by the students' background. Thus the supporting process may emphasize the facilitation process in order to enhance the students' creative thinking. These two supporting processes overlap and are emphasized differently in different

phases of the project work. At the beginning, the emphasis can be more on the facilitation process whereas towards the end the coaching process plays a major role. Managing the balance between the support processes is part of the teacher's professional skills.

These critical tensions are relative to time and resources. Relativity with respect to time refers to the use of time and time constraints. Efficient teaching should produce a certain amount of study points in a given time. Also, from the students' perspective, each study point equals approximately 27 hours of student work, which should be kept in mind. Thus, the team composition and challenge formulation need to be formulated in a way that the goal is reachable in the given time. Depending on the available resources, the course can be designed to have more or fewer experiential activities, such as visiting a client's premises, visiting another country or inviting professionals to work with the students.

### 5.3 Managing a variety of project paths

The critical tensions imply that there is a broad scope of combinations of approaches for planning and managing project work. The project work needs to reach its goal; the project must develop a final outcome that can be assessed. Students produce this outcome in different ways. From the course management point of view, it is critical to understand how to protect diversity and creativity within the projects and at the same time ensure the proper outcome – that is, to reach the expected goal at the required level.

Thus the third objective of this dissertation is to analyze typical project paths that lead to either successful or unsuccessful project outcomes. Further critical stages within processes are identified in order to suggest how to overcome the challenges and thus manage the variety of processes involved in client-based project work.

Seven typical process paths can be identified. The processes differ from each other in terms of students' approach to learning (Entwistle 2001), the level of understanding in their project outcome (Biggs & Collins 1982), students' will of gaining ownership over the projects and enthusiasm of making an effort to challenge themselves. The seven paths are called in descriptive manner: Runaway, The Undemanding path, The Quick&Dirty, Guided Tour, Great Adventure, Mission Almost Impossible and Never Ending Story.

(1) *Runaway* refers to a path that never really starts. The students refuse to take responsibility for the project work. They use their time to complain about the constructive learning method or the fact that their "precious time" is being used for

some company without pay. They debate whether they should participate in the course or not. Their approach to learning is clearly strategic; they weigh different options on the basis of how to gain the most credits. They are not motivated enough to take part in a constructive client-based experiential course.

In one development project (2009) the aim was to suggest ways how to manage brands within educational organizations. One group had a task to benchmark three different educational institutions that had already put effort into brand building. Week after week the group came into meeting sessions explaining that they had not done the task or even parts of it. They didn't take responsibility over the project and they were not able to submit anything as a final report. (Case illustration)

(2) The *Undemanding* path is a case where the problem setting is too easy and does not require enough creative or critical thinking. The project work can be, for example, a routine customer survey where the students do not need to be either very innovative or critical.

A group (2008) got a straightforward assignment from the client. During the process the client guided the group several times and used the students mainly as assistants for a customer survey. Students, even if they would have wanted, had their hands tied and could not do much more. (Case illustration)

(3) The *Quick & Dirty* path is plain and straightforward. In this path, the students aim at quick solutions without really putting their minds to the problem. Their use of capacity is low and they do not challenge themselves. They jump to conclusions. In the guidance sessions, they tend to argue for their quick decisions rather than openly broaden their viewpoint.

A group needed to think how to market a carpenter education for potential students. The students didn't want to use a lot of effort to the work. For example a customer survey that was conducted for this client, was used to other school work as well. The group preferred not to come to the guiding sessions. Even though the students reached the outcome, it showed low levels of understanding and lacked the understanding of the context. (Case illustration)

(4) *Guided Tour* refers to a path where the students are active and take responsibility for their work. However, when they face contradictions or conflicts, they tend to ask for advice rather than solve the contradictions on their own. They have problems with bearing uncertainty. They expect the teacher to give specific advice on what to do in different phases.

One group with case Stundars (2012) was working hard and followed all the instructions well. However, every time there were new instructions, they were stressed and uncertain, how to proceed. Some of them wanted to discuss often with the teacher, how to proceed. (Case illustration)

(5) *Great Adventure* refers to a path where active, motivated students are willing to make an effort and try hard to develop their own thinking and application skills. They take responsibility for the project and even ownership over it. It becomes their project. They engage in a trial and error process and actively seek for solutions. They are able to bear the uncertainty. Their approach to learning is deep; they aim to understand what they are doing and learn for their own sake. In the guidance sessions, they put forward their own ideas and discuss possible solutions based on their own work in the project.

In pilot course that was run together with Umeå Design Institute, one group developed a concept for a bicycle event in Vaasa. The group worked very well right from the beginning, putting their time and effort in development work as well as in team building. They used different creative methods, interviewed professionals and constructed the business logic around the event. They took the project further than expected. They became a group that was the first ones in presenting their work and illustrating to others, how things can be done. They claimed ownership of the project quickly and became a model for others as well. (Case illustration)

(6) *Mission Almost Impossible* refers to a path where the students are eager to try new things. They push themselves away from their comfort zone and engage in a trial and error process. They have fun with trying out new approaches; however, they are often so excited about creativity and specific creative methods that they lose their focus. They can have great difficulties with forming a solid output, that is, reaching the goal.

Several groups were excited about different creative methods used together with design students. They clearly engaged themselves into creative processes. However, they had difficulties in understanding, why all those creative methods were used and how should those be related into the final outcome. After the design students left the project, the students were lost for some time. They had great difficulties in putting their own effort to the project and reach the project outcome at the required level. (Case illustration)

(7) *Never Ending Story* refers to a path where the students may engage in a creative process, but face so many difficulties on the way that they are not capable of reaching a common final solution in the end. They might reach a weak outcome, often including ideas and parts of a holistic concept, but not a coherent whole. They can even run away as in path one and miss the outcome altogether. The students can be overexcited at the beginning, but over time differences in opinions



and other teamwork challenges diminish the motivation. When they should push harder and make a real effort, they tend to quit. Thus the process turns out to be unsuccessful.

The paths described above are illustrations of typical paths. However, not all the students follow the same path and indeed, there may be students within the group that are wishing for a Quick & Dirty path whereas there are students that are motivated to put their minds on and head for A Great Adventure.

The students may not necessarily follow only one project path. During the project time the students may switch from one path to another. It is suggested that the teacher needs to identify what project path the students are heading down and direct the supporting facilitating and coaching processes accordingly in order to enable a creative and critical outcome.

From the teaching management point of view, the *Runaway* path is the most problematic. The students are not motivated enough to work in these kinds of projects. The students have to be informed of what is expected from them before they sign up for the course.

The *Undemanding* path occurs most often when the students work with the client by themselves. The teacher has the responsibility to match the level or the project goals with the intended learning outcomes. Thus it is suggested that even independent client-based project work should be negotiated with the teacher or that the teacher should provide guidelines on how to develop project objectives.

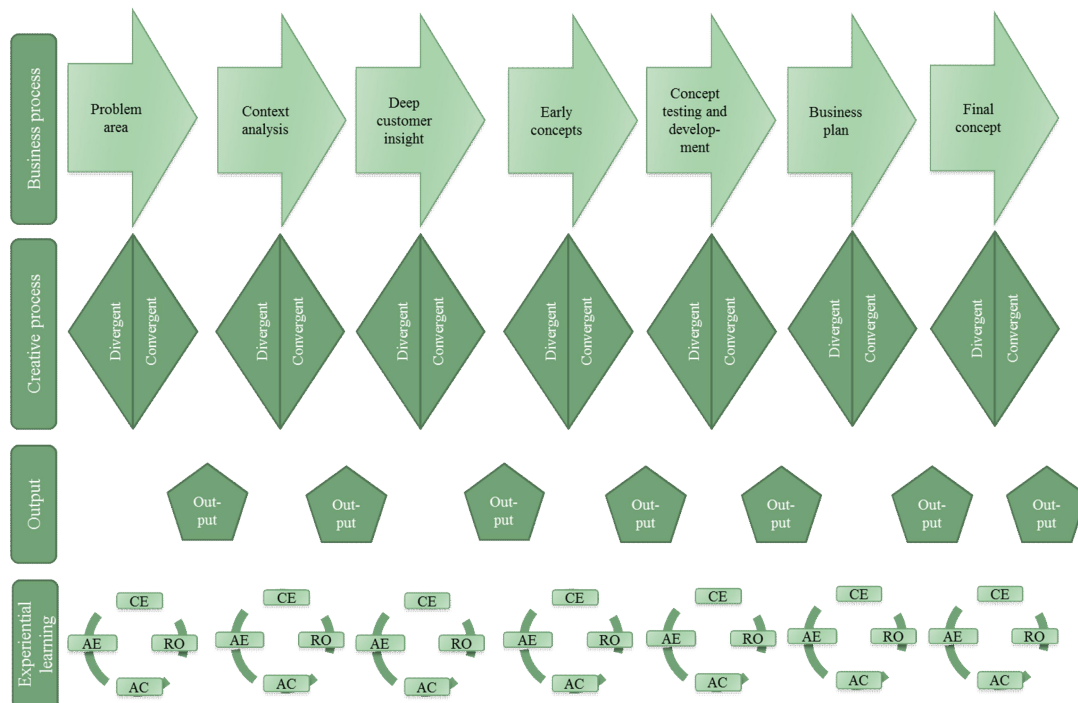
*Runaway* and *Quick & Dirty* illustrate how difficult it can be for the students to really engage in creative processes. The students do not want to push themselves out of their comfort zone, or they see the creative methods and techniques as naïve, useless or a waste of their time. The *Runaway* path ends before it has started, while the *Quick & Dirty* path emphasizes goal-orientation with a lack of open-mindedness. These students often have strong confidence in their own business-oriented thinking. They need to have their eyes opened to different possible solutions. To help them think in broad terms, it is suggested that the use of creative tools in different phases should be a requirement.

*Guided Tour* and *Great Adventure* are examples of successful project paths. The students within a *Guided Tour* are excited and motivated but lack the self-confidence to trust their own thinking and to produce their own solutions. They find it very difficult to understand that there is not just one correct answer to the problem. These students need support to trust their own thinking and self-confidence. *Great Adventure* is a showpiece path. The students are able to com-

bine creativity and business-oriented critical thinking in such a way that they produce innovative, business-oriented holistic outcomes. The students are self-steering and eager to find the solutions on their own.

In the process paths *Mission Almost Impossible* and *Never Ending Story*, students are full of enthusiasm and creativity. However, their projects lack goal-orientation, decision making and business-oriented critical thinking. *Mission Almost Impossible* can lead to the achievement of course goals, while *Never Ending Story* lacks a coherent outcome. This is also problematic as the students have put a lot of time and effort into their work and they think it is worth many credits and a high grade. However, if they have not achieved a coherent whole, they cannot be given a high grade. This is difficult for the students to comprehend and allows feelings of frustration and despair to come up. It is suggested that the assessment criteria should be discussed with the students beforehand in order to make them explicit.

The project outcome can be ensured by phasing the project in a way that allows creativity but focuses on decision-making points. This gives structure and security for the students, and allows creative thinking, trial and error processes and even excesses without losing focus. Figure 7 exemplifies the phasing of the project path.



**Figure 7.** Phasing the project based on business and creative processes.

Each phase integrates a business process, a creative process, student outputs and the experiential learning cycle. The backbone of the structure is the business development process that represents the marketing knowledge. There are several possible process models within business and marketing literature, such as new product development model, brand building model or marketing communication planning model. This theoretical frame forms the structure for the course. Even though the business development processes are iterative in nature, for the case of simplification, it is presented chronologically.

Each phase of the chosen business process includes divergent and convergent aspects of creative process. The divergent phases open up new possibilities whereas the convergent phase pushes the students to make decisions (Tassoul 2009: 63).

Student output refers to decision making points and reflection on students' learning. The student output in the decision making points can be in a form of presentation, essay, poster or some other kind of tool that comprises the students' thinking. Feedback for this output from teachers, peers, client or professional partners allows the students to rethink their thinking and in case needed, adjust their view. This allows the iteration to occur.

The individual reflection on what has been learnt becomes evident in the learning diaries that can be an output of individual learning. Phasing the project and individual learning diary enables returning to the earlier writings and thoughts. Thus, this enables the learning to deepen as the learning becomes more explicit for the students themselves.

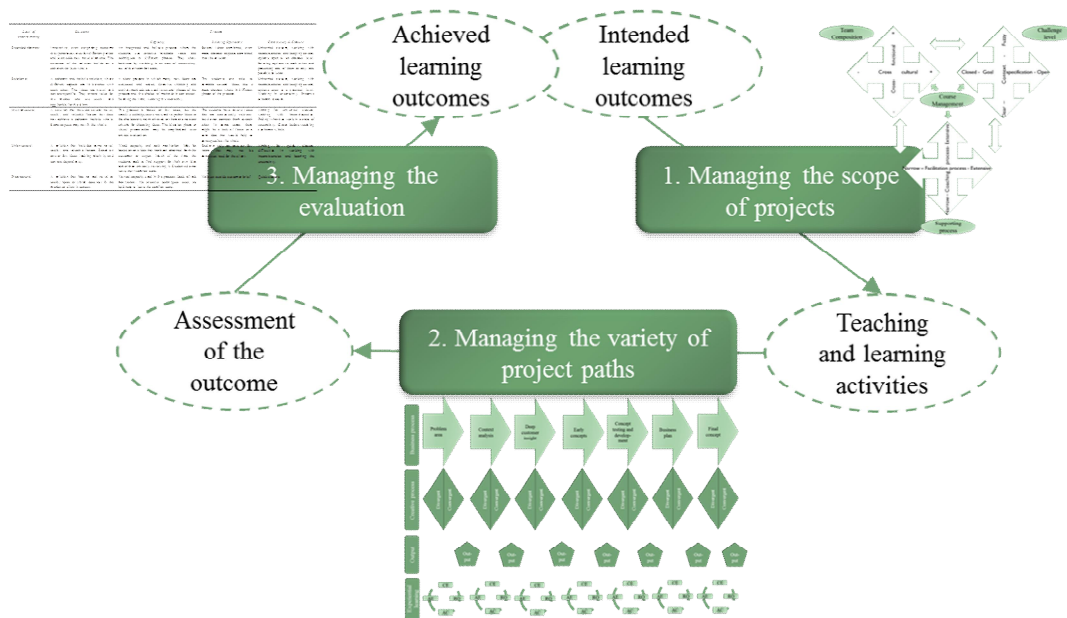
Each phase also illustrate a cycle of experiential learning as the students need to experience (CE), observe (RO), conceptualize (AC) and experiment (AE) while working through the phases. It is assumed that in each phase the students face and need to solve contradictions. This allows experiential learning to happen.

## 5.4 Managing experiential learning through the contextualized model of constructive alignment

The framework of constructive alignment (Biggs 1996) emphasizes that intended learning outcomes, teaching and learning activities and assessment are aligned together and openly communicated to the students. It is argued that the students should focus their efforts on these aspects, as this will increase their deep learning. The framework presents a holistic model with parsimony and scope. Howev-

er, it lacks the contextualization to marketing. Next, I use the constructive alignment as a theoretical framework to integrate my findings.

This study has looked into developing marketing knowledge and skills in client-based projects in the context of early phases of product and service development. Multiplicity of marketing skills, rigorous real-life applications and the challenging context of the fuzzy front end imply that there are challenges in all phases of constructive alignment. In order to manage teaching, these challenges need to be understood. Figure 8 integrates the findings and presents a contextualized and extended framework of constructive alignment in order to increase our understanding of the scope and managerial challenges faced.



**Figure 8.** Managing client-based marketing development projects

*1. Managing the scope of the projects* highlights the critical stages in planning the client-based project work. The identified tensions (team composition and challenge setting) highlight the wide sphere of possible starting points. The tension within facilitating and coaching process highlight the challenge within supporting both creativity and business-oriented critical thinking in the project work. When the teacher understands the scope of possible variations, the mixture can be chosen so that the selected intended learning outcomes can be reached. It is further suggested that balancing between different tensions becomes important.

2. *Managing the variety of project paths* refers to teaching and learning activities during the development work in order to ensure that the projects are finished at the expected time frame and on the required level. Individual students and student groups may have different approaches to learning, different motivation level and different ideas about how much time and effort they are willing to put in in the school work (Titus 2007). This makes it hard to manage challenging projects, such as projects within the context of fuzzy front end.

Phasing the project using business and creative processes is suggested as a tool to manage the variety of project paths. A phased project becomes manageable for the teacher. It also gives more structure for the students and diminishes the uncertainty. Still, it provides the students with the freedom to engage in creative processes. As each phase integrates and uncovers a cycle of experiential learning, the student's individual experience becomes explicit and intentional.

3. *Managing the evaluation* refers to the assessment practices that compare the project work with intended learning outcomes and measures the achievement. A framework of assessing creative problem solving in client-based projects is suggested as tool for managing the evaluation. It is based on SOLO taxonomy and it identifies different levels on understanding (Biggs & Collins 1982). It also combines both the outcome and the process of the project work. The cognitive and emotional outcomes emerge through student reflection and illustrate experiential learning where learning is seen as transformation of experience.

## 6 CONCLUSIONS

### 6.1 Summary of the study

This action research focuses on the development of the knowledge and skills of the future marketers. It has used experiential learning and more specifically client-based marketing development projects as a tool to enhance the skills of problem solving, creativity and innovativeness, teamwork and communication. These skills are essential for future marketers especially in the context of the early phases of service and product development. Thus, those should be rehearsed already during the higher education.

The aim of this study is to increase our understanding of the managerial challenges in teaching marketing knowledge and skills through experiential client-based projects in the context of the early and uncertain phases of service and product development.

The study is based on seven years of action research. It consists of several cycles of action and reflection. The reflection of learning is reported in five independent essays and in this doctoral dissertation. The essays shed light on the overall development work from different angles. The first essay provides an *A priori* model that integrates experiential learning, learning environments and constructive coaching in enhancing deep learning in higher education. The second essay focuses on learning environments, and through student engagement it constructs a model for a creative and effective learning environment. The third essay reports findings on cross-functional and international teamwork and discusses the challenges in managing teaching in such projects. The fourth essay focuses on students' construction of professional identity during their education and suggests ways how to enhance this development through cross-functional teamwork. Finally, the fifth essay concentrates on the assessment of creative problem solving in client-based project work.

In completing the first objective a comprehensive model of holistic teaching process is created. It integrates constructive alignment and experiential learning to challenges in developing marketing knowledge and skills in client-based development projects. The model sheds light on teaching and challenges faced in different phases of the process.

During the second objective the critical stages and tensions within the comprehensive model were identified. It is concluded that managing team composition, deciding on challenge level and balancing between supporting processes are critical for course management. The tensions illustrate the large scope of possible projects and highlight the managerial challenges and decision-making points.

In the third objective the typical project paths that lead to either successful or unsuccessful project outputs are analyzed. Seven different paths are identified and critical stages within those paths are revealed. A phasing of client-based projects based on a business process, a creative process, student outputs and an experiential learning cycle is suggested as a tool to overcome the challenges and thus manage the variety of processes involved in client-based project work.

Finally, the findings are integrated to the framework of constructive alignment in order to produce a contextualized and extended understanding of the challenges in managing experiential client-based teaching.

Next, the trustworthiness of the present research is discussed, the theoretical and managerial contribution is highlighted, the limitations of the current study are identified and directions for future research are proposed.

## 6.2 Trustworthiness of the research

Action research resembles everyday development work and business consultancy and indeed it has been questioned what makes action research scientific research instead of development activity or consulting. A sound research process calls for systematic and rigorous processes. However, based on the importance of messiness and deep learning from the development process, the criterion for success in action research should not be whether the initial steps are followed or the cycles of action and reflection look neat and tidy. The quality and success of the action research should be evaluated based on a strong and authentic sense of development and evolution of practices and processes, understanding of those practices and of the situations where the practice occurs (Kemmis & McTaggart 2000). Indeed, in action research, the final arbiter of validity is usefulness (Ladkin 2004).

Lincoln and Cuba (1985: 218–219) suggest that trustworthiness of a qualitative research should be evaluated by assessing the credibility, transferability, dependability and confirmability of the study. Stringer (2007: 57–59) applies these criteria more specifically to action research. *Credibility* refers to the plausibility and integrity of the study. In action research the credibility in the research process and with participants is the fundamental issue and can be assisted with prolonged en-

gement, persistent observation, triangulation, member checking, participant debriefing, diverse case analysis and referential adequacy (Lincoln & Cuba 1985: 294–296, 301–316; Stringer 2007: 57–59). In this study credibility has been enhanced through prolonged engagement with the research object as the development work elapsed seven years and eight pilot courses, where different aspects have been studied. This also enhances the credibility by persistent observation and triangulation.

*Transferability* refers to the possibility of applying the outcomes of the study to other contexts. It can be enhanced by a detailed description of the contexts, methods and activities. Thus people reading the report are able to judge whether their own context is similar enough in order to apply the outcome to their situation (Lincoln & Cuba 1985: 296 – 298, 316; Stringer 2007: 59). In the current study transferability is enhanced by providing a description of the process, challenges and conclusions. Tools and guidelines are given to the readers to be used in similar contexts. Also, some ideas have been tested in using the process in other courses.

*Dependability* refers to research procedures that are clearly defined and open for scrutiny. It can be enhanced by providing a description of the procedures that have been followed and thus providing the basis for judging the extent to which they are dependable (Lincoln & Cuba 1985: 298–299, 316–318; Stringer 2007: 59). In the current study, dependability is enhanced by open and explicit reporting of my research. The research aim and objectives are clearly and openly stated, the action research as methodology is motivated and argued for, the data gathering and analysis is reported and the conclusions are related to earlier literature.

*Confirmability* refers to the evidence that the procedures described actually took place. It can be strengthened by keeping records, reporting and maintaining an audit trail that enables an observer to view the data collected and other materials used in the study (Lincoln & Cuba 1985: 299–301, 318–328; Stringer 2007: 59). In the current study confirmability is enhanced by keeping records of the data, by systematic analysis processes and by writing essays that follow the scientific guidelines for analysis and are peer reviewed before publication. Also a description of each pilot course is presented in the appendix.



## 6.3 Contribution of the study

### 6.3.1 Theoretical contribution

This study contributes to earlier literature on marketing education in four ways. *First, the holistic teaching concept provides a comprehensive picture of challenges tied to experiential, client-based teaching.* Even though the earlier research has investigated several distinct aspects of the concept, such as experiential learning (e.g., Petkus 2000; Young 2002; Helms, Mayo & Baxter 2003), client-based projects (Lopez & Lee 2005; Strauss 2011) or skills development (Middleton & Long 1990; Young & Murphy 2003; Schlee & Harish 2010), this concept aims to combine these into a holistic model. This is significant in order to understand the multiple challenges that teachers face in managing these kinds of courses. Also, in most cases the earlier research has focused on the development of one skill at a time. This concept emphasizes the learning of a diverse set of skills. Further, the proposed concept not only emphasizes the experiential learning activities, but also takes the experiential learning theory as a background philosophy for the development work.

*Second, the research identifies critical tensions in various stages of the management process.* It gives deeper understanding of the competing and complementary facets and the multiple challenges faced in managing experiential client-based marketing development project courses. The earlier research has identified the challenges within teamwork (Kayes et al. 2005), cross-functional teams (Lovejoy & Srinivan 2002) and international teams, but has lacked an understanding of how they relate to each other. Also, the study describes an approach to balancing between the project's problem context and goal specification that is relevant and new to the marketing education literature. The importance of creativity (e.g., Titus 2000, 2007) and critical thinking in problem solving (e.g., Gray et al. 2007) have been identified by marketing education researchers earlier, but the reconciliation of these processes is new to the literature. This study sheds light on these tensions and discusses the ways in which they can be managed.

*Third, the study contributes by extending and contextualizing the framework of constructive alignment (Biggs 1996).* Even though the earlier framework lays the groundwork for managing teaching, this study sheds light on the challenges faced when teaching in the context of the fuzzy front end. Also, this study suggests ways how to overcome the identified challenges.

*Fourth, the study contributes by producing a deeper understanding of a variety of learning outcomes explicit in experiential learning.* Learning is not only about

cognitive outcomes. The affective aspect – such as feelings of uncertainty, frustration, success, delight, self-assurance and self-esteem – becomes evident in experiential learning. However, as the study highlights, it is challenging to manage courses with strong emotional phases. The study suggests that the experiential aspects should be openly discussed with the students and that the phasing of the projects should be used as a tool to ease negative affective outcomes and ensure positive affective outcomes.

### *6.3.2 Implications for teachers and educational organizations*

This study contributes to the marketing education practice both for the individual teachers and for educational organizations. For an individual teacher, the concepts serve as teaching tools to plan and manage courses. They shed light on the challenges in different phases of the course and help to understand the roles of the teachers in these different phases. Through identifying several typical paths that students take to complete their client-based assignments and suggesting ways to manage different kinds of paths, the study also contributes to understanding the management of project work that incorporates analytical business-oriented critical thinking and creative problem solving. The study emphasizes the teacher's role as a manager balancing between different, sometimes contradicting matters, aiming to support students' deep understanding.

For educational organizations, the study first highlights the multiple challenges involved in experiential client-based projects. Client-based projects are useful in many ways. For example, they support skills development, they enhance the cooperation between the university and local businesses, and they are fun and inspiring for the clients, students and teachers alike. However, the emotional overload can be stressful and challenging for a teacher. This is aligned with earlier studies that have found that many teachers find client-based courses overwhelming and are exhausted afterwards (Lopez & Lee 2005).

Second, the study also highlights the use of teaching resources. Experiential learning projects are often done within different projects. For example, the cross-cultural courses were piloted within the Botnia-Atlantica program. These kinds of courses often require more resources than what is budgeted within faculties. Even though these projects are a huge help in developing teaching, the projects should be implemented within day-to-day curriculums. A critical question is whether the deep learning experiences gained through these projects are a priority objective for the university and whether it should allocate resources toward this.

Third, the management model developed in this study serves as a concept that can be used not only in universities but also at other educational organizations as well. Even though the model is contextualized for the master's level, it can be modified to suit other levels as well. Furthermore, it enables a university to sell its expertise in educational management to other parties.

## 6.4 Limitations and future research directions

The study is not without its limitations and it also opens up interesting paths for future research. Even though the study has acknowledged the individual differences between students, it has focused more on teams than individual students. However, there can be significant individual differences between marketing students and their ways of learning. Future research could focus on these individual differences.

In this study, the teacher-researcher has been the same all the time. The study has focused on the different roles of an individual teacher. It has not focused on team teaching or the use of professionals in the classroom. Future research could elaborate on these matters.

This study has focused on how to manage teaching marketing knowledge and skills in the context of the early phases of service and product development. The chosen skills are partly generic and partly marketing-specific. Future research could test the teaching concepts in other contexts as well, whether within marketing, business or other disciplines. Also, the Finnish context and its educational culture set a limitation. Future research could expand our understanding by focusing on different national or international contexts.

Earlier research has argued strongly for experiential pedagogies (Gremier et al. 2000; Ardley & Taylor 2003) and focused mainly on the positive affective learning outcomes gained through experiential pedagogies. This study has highlighted that the affective learning outcomes can be both positive and negative. This leads the way towards future research in taking a deeper and more critical focus on the affective learning outcomes.

This study has focused on face-to-face learning environments, where the teacher has a consultative role. However, the rapid technological changes, the rise of e-learning and social media together with the emergence of the virtual generation (Proserpio & Gioia 2007) put pressure on marketing educators to keep pace with technological change as requested by Smart, Kelley and Conant (1999). Also, even though there are several studies on the use of technology in teaching of mar-

keting, there have been only a few attempts to transfer client-based constructive teaching online (for an exception, see Jaskari & Jaskari 2013). Future research could focus on managing online challenges.

## REFERENCES

- Aaltola, J. & Syrjälä, L. (1999). Tiede, toiminta ja vaikuttaminen, Teoksessa Heikkinen H. L. T., Huttunen, R. & Moilanen, P. (Eds). *Siinä Tutkija Missä Tekijä, Toimintatutkimuksen perusteita ja näköaloja*. Jyväskylä: Atena kustannus, 11–24.
- Ackerman, D. S. & Hu, J. (2011). Effect of type of curriculum on educational outcomes and motivation among marketing students with different learning styles. *Journal of Marketing Education* 33: 3, 273–284.
- Aistrich, M., Saghafi, M. M. & Sciglimpaglia, D. (2006). Ivory tower or real world? *Marketing Education Review* 16: 3, 73–80.
- Amabile, T. M. (1998). How to kill creativity. *Harvard Business Review* 76: 5, 77–87.
- American Marketing Association (2007). *Definition of Marketing*. Available at <http://www.marketingpower.com/aboutama/pages/definitionofmarketing.aspx>.
- Anderson, L. (2006). Building confidence in creativity: MBA students. *Marketing Education Review* 16: 1, 91–96.
- Ankers, P. & Brennan, R. (2002). Managerial relevance in academic research: an exploratory study. *Marketing Intelligence and Planning* 20: 1, 15–21.
- Ardley, B. & Taylor, N. (2010). The student practitioner. Developing skills through the marketing research consultancy project. *Marketing Intelligence & Planning* 28: 7, 847–861.
- Athaide, G. A. & Desai, H. B. (2005). Design and implementation of an interdisciplinary marketing/management course on technology and innovation management. *Journal of Marketing Education* 27: 3, 239–249.
- Barr, T. F. & McNeilly, K. M. (2002). The value of students' classroom experiences from the eyes of the recruiter: Information, implications, and recommendations for marketing educators. *Journal of Marketing Education* 24: 2, 168–173.
- Beamish, P. W. & Calof, J. L. (1989). International business education: a corporate view. *Journal of International Business Studies* 20: 3, 553–564.
- Beard, C. & Wilson, J. P. (2006). *Experiential Learning: A Handbook of Best Practices for Educators and Trainers*. London: Kogan Page Ltd.
- Bennis, W. G. & O'Toole, J. (2005). How business schools lost their way. *Harvard Business Review* 83: 5, 96–104.

- Benson, G. L. (1983). On the campus: how well do business schools prepare graduates for the business world? *Personnel* 60: 4, 61–66.
- Berdrow, I. & Evers, F. T. (2011). Bases of competence: A framework for facilitating reflective learner-centered educational environments. *Journal of Management Education* 35: 3, 406–427.
- Biggs, J. (1979). Individual differences in study processes and the quality of learning outcomes. *Higher Education* 8, 381–394.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education* 32, 347–364.
- Biggs, J. (1999a). *Teaching for Quality Learning at University*. Buckingham, UK: SRHE and Open University Press.
- Biggs, J. (1999b). What the student does: teaching for enhanced learning. *Higher Education Research & Development* 18: 1, 57–75.
- Biggs, J. B. & Collins, K. F. (1982). *Evaluating the Quality of Learning: the SOLO Taxonomy*. New York: Academic Press.
- Biggs, J. & Tang, C. (2007). *Teaching for Quality Learning at University. What the Student Does*. 3rd edition. Berkshire: McGraw Hill, The Society for Research into Higher Education & Open University Press.
- Boldy, D., Jain, S. & Northy, K. (1993). What makes an effective European manager? A case study of Sweden, Belgium, Germany and Spain. *Management International Review* 33: 2, 157–169.
- Boud, D. & Feletti, G. (Eds). (1999). *Ongelmalähtöinen oppiminen: Uusi tapa oppia*. Helsinki: Hakapaino.
- Boyd, H. W. & Levy, S. J. (1963). New dimensions in consumer analysis. *Harvard Business Review* 41: 6, 129–140.
- Brennan, R. (2004). Should we worry about an “academic-practitioner divide” in marketing? *Marketing Intelligence & Planning* 22: 5, 492–500.
- Brown, T. (2008). Design thinking. *Harvard Business Review* 86: 6, 84–92.
- Bruce, G. & Schoenfeld, G. (2006). Marketers with MBAs: bridging the thinking-doing divide. *Marketing Intelligence & Planning* 24: 3, 257–282.
- Brunel, F. F. & Hibbard, J. D. (2006). Using innovations in student teaming to leverage cross-functional and marketing learning: Evidence from a fully integrated undergraduate core. *Marketing Education Review* 16: 3, 15–23.

- Buzzard, C., Crittenden V. L., Crittenden W. F. & McCarty, P. (2011). The use of digital technologies in the classroom: a teaching and learning perspective. *Journal of Marketing Education* 33: 2, 131–139.
- Cagan, J. & Vogel, C. (2002). *Creating Breakthrough Products: Innovation from Product Planning to Program Approval*. Englewood Cliffs, NJ: Financial Times Prentice Hall.
- Calantone, R., Garcia, R. & Dröge, C. (2003). The effects of environmental turbulence on new product development and strategy planning. *The Journal of Product Innovation Management* 20: 2, 90–103.
- Cardozo, R. N., Durfee, W. K., Ardichvili, A., Adams, C., Erdman, A. G., Hoey, M., Iazzo, P.A., Mallick, D.N., Bar-Cohen, A., Beachy, R. & Johnson, A. (2002). Experiential education in new product design and business development. *Journal of Product Innovation Management* 19: 1, 4–17.
- Chen, G., Donahue, L. M. & Klimoski, R. J. (2004). Training undergraduates to work in organizational teams. *Academy of Management Learning and Education* 3: 1, 27–40.
- Clarke, P. & Gray, D. (2006). The marketing curriculum and educational aims: towards a professional education? *Marketing Intelligence and Planning* 24: 3, 189–201.
- Collins, M. A. & Amabile, T. M. (1999). Motivation and creativity. In Stenberg, R. J. (Ed.). *Handbook of Creativity*. New York: Cambridge University Press, 297–312.
- Cook, T. (1998). The importance of mess in action research. *Educational Action Research* 6: 1, 98–109.
- Cooper, R. G. (1999). The invisible success factors in product innovation. *Journal of Product Innovation Management* 16, 115–133.
- Cunningham, A. C. (1999). Commentary confessions of a reflective practitioner: meeting the challenges of marketing's destruction. *European Journal of Marketing* 33: 7/8, 685–697.
- Dacko, S. G. (2006). Narrowing the skills gap for marketers of the future. *Marketing Intelligence & Planning* 24: 3, 283–295.
- Darian, J. C. & Coopersmith, L. (2001). Integrated marketing and operations team projects: learning the importance of cross-functional cooperation. *Journal of Marketing Education* 23: 2, 128–135.

Davis, R., Misra S. & Van Auken, S. (2002). A gap analysis approach to marketing curriculum assessment: a study of skills and knowledge. *Journal of Marketing Education* 24: 3, 218–224.

Dawes, P. L. & Patterson P. G. (1987). An empirical study of product management in Australia. *Australian Journal of Management* 12: 2, 237–261.

Deckinger, E. L., Brink J. M. Katzenstain, H. & Primavera, L. H. (1989). How can advertising teachers better prepare students for entry-level advertising agency jobs? *Journal of Advertising Research* 29: 6, 37–47.

De Bono, E. (1970). *Lateral Thinking: Creativity step by step*. Perennial Library.

de los Santos, G. & Jensen, T. D. (1985). Client-sponsored projects: bridging the gap between theory and practice. *Journal of Marketing Education* 7: 2, 45–50.

Deeter-Schmelz, D. R., Kennedy, K. N. & Ramsey R. P. (2002). Enriching our understanding of student team effectiveness. *Journal of Marketing Education* 24: 2, 114–124.

Denise, P. S. & Harris, I. M. (eds.) (1989). *Experiential Education for Community Development*. Contributions to the Study of Education, No 31, Greenwood Press.

Dougherty, D. (1992). Interpretative barriers to successful product innovation in large firms. *Organizational Science* 3, 179–202.

Duke, C. R. (2002). Learning outcomes: comparing student perceptions of skill level and importance. *Journal of Marketing Education* 24: 3, 203–217.

Eickmann, P., Kolb, A. & Kolb, D. (2002). Designing learning. Paper presented at the conference "Managing as Designing: Creating a New Vocabulary for Management Education and Research", Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio, June 14–15, 2002.

Elliot, J. (1991). *Action research for educational change*. Philadelphia: Open University Press.

Entwistle, N. (2001). Styles of learning and approaches to studying in higher education. *Kybernetes* 30: 5/6, 593–602.

Entwistle, N., Hanley, M. & Hounsell D. (1979). Identifying distinctive approaches to studying. *Higher Education* 8, 365–380.

Entwistle, N. J. & Ramsden, P. (1983). *Understanding Student Learning*, Croom Helm, London.

Eriksson, L. T. & Hauer, A. M. (2004). Ming map marketing: a creative approach in developing marketing skills, *Journal of Marketing Education* 26: 2, 174–187.



- Eriksson, P. & Kovalainen, A. (2008). *Qualitative Methods in Business Research*, London: Sage.
- Evans, M., Nancarrow, C., Tapp, A. & Stone, M. (2002). Future marketers: future curriculum: future shock? *Journal of Marketing Management* 18: 5/6, 579–596.
- Evans, M., Jamal, A. & Foxall, G. (2006). *Consumer Behaviour*. West Sussex: John Wiley & Sons.
- Evers, F. T., Rush J. & Berdrow J. (1998). *The Bases of Competence: Skills for Life-Long Learning and Employability*. San Francisco: Jossey-Bass Publishers.
- Finch, D., Nadeau J, and N. O'Reilly (2013). The future of marketing education: a practitioner's perspective. *Journal of Marketing Education* 35: 1, 54–67.
- Floyd, C. J. & Gordon, M. E. (1998). What skills are most important? A comparison of employer, student, and staff perceptions. *Journal of Marketing Education* 20: 2, 103–109.
- Fox, T. L. (2002). A case analysis of real-world systems development experiences of CIS students. *Journal of Information Systems Education* 13: 4, 343–350.
- Freeman, L. & Greenacre L. (2011). An examination of socially destructive behaviors in group work. *Journal of Marketing Education* 33: 1, 5–17.
- Gabriel, C. (1990). The validity of qualitative market research. *Journal of Market Research Society* 32: 4, 507–519.
- Gemser, G. & Leenders M. A. A. M. (2011), Managing cross functional cooperation for new product success. *Long Range Planning* 44: 1, 26–44.
- German, T. P. & Barrett, H. C. (2005). Functional fixedness in a technologically sparse culture. *Psychological Science* 16: 1, 1–5.
- Gibson-Sweet, M., Brennan, R., Foy, A., Lynch, J. & Rudolph, P. (2010). Key issues in marketing education: the marketing educators view. *Marketing Intelligence & Planning* 28: 7, 931–943.
- Goldsmith, R. E. (2004). Current and future trends in marketing and their implications for the discipline. *Journal of Marketing Theory and Practice* 12: 4, 10–17.
- Goodell, P. W. & Kraft, F. B. (1991). Issues of the use of “client” projects in marketing education. *Marketing Education Review* 1: 4, 32–44.
- Government Decree on University Degrees 794/2004. 794/19.8.2004.
- Gray, B. J., Ottesen, G. G., Bell, J., Chapman, C. & Whiten, J. (2007). What are the essential capabilities of marketers? A comparative study of managers', aca-

demics' and students' perceptions. *Marketing Intelligence & Planning* 25: 3, 271–295.

Gremler, D. D., Hoffman, K. D., Keaveney, S. M. & Wright, L. K. (2000). Experiential Learning Exercises in Services Marketing Courses. *Journal of Marketing Education* 22: 1, 35–44.

Griffin, A. & Hauser, J. R. (1996). Integrating r&d and marketing: a review and analysis of the literature. *Journal of Product Innovation Management* 13, 191–215.

Hakkarainen, K., Lonka, K. & Lipponen, L. (1999). Tutkiva Oppiminen. Älykään toiminnan rajat ja niiden ylittäminen. Porvoo: Wsoy.

Hatcher, J. A. & Bringle, R.G. (1997). Reflection. *College Teaching* 45: 4, 153–158.

Heikkinen, H. L. T. & Jyrkämä (1999). Mitä on toimintatutkimus? In Heikkinen H. L. T., R. Huttunen & P. Moilanen (Eds). *Siinä Tutkija Missä Tekijä, Toimintatutkimuksen perusteita ja näköaloja*. Jyväskylä: Atena kustannus, 25–62.

Helms, M. M., Mayo, D. T. & Baxter, J. T. (2003). Experiential learning: the benefits of trade shows for marketing students and faculty. *Marketing Education Review* 23: 3, 17–25.

Herstatt, C. & Verworn, B. (2001). *Managing the “fuzzy front end” of innovation*. Working Paper No. 4, Technical University of Hamburg.

Holbrook, M. B. (2005). Marketing miseducation and the mba minds: bullshit happens. *Marketing Education Review* 15: 3, 1–5.

Holm, L. & Johansson, U. (2005). Marketing and design: rivals or partners? *Design Management Review* 16: 2, 36–41.

Holman, D., Pavlica, K. & Thorpe, R. (1997). Rethinking kolb's theory of experiential learning in management education. *Management Learning* 28: 2, 135–148.

Honey, P. & Mumford, A. (1992). *Manual of Learning Styles*. 3<sup>rd</sup> ed. Honey Publications, Maidenhead.

Hunt, S. D. & Laverie, D. A. (2004). Experiential learning and the hunt-vittel theory of ethics: teaching marketing ethics by integrating theory and practice. *Marketing Education Review* 14: 3, 1–14.

Hyman, M. R. & Hu, J. (2005). Assessing faculty beliefs about the importance of various marketing job skills. *Journal of Education for Business* 81: 2, 105–110.

Jaskari, M.-M. (2008a). The new holistic model for learning enhancement in the context of higher marketing education. In the *Proceedings of the Academy of Marketing Annual Conference 2008*.

Jaskari, M.M. (2008b). Put your hands in dirt and dig for solutions - coaching the learning process in authentic cases. In Kallioinen Outi (ed) *Learning by developing - new ways to learn*. Proceedings of the 1st Conference on Innovative Pedagogical Models in Higher Education, Vantaa: Laurea publications D-5, 42–52.

Jaskari, M.-M. (2011). Making sense of marketing students' professional identity construction through multidisciplinary project course. In the *Proceedings of the 16th Annual Education, Learning, Styles, Individual differences Network, ELSIN*, 247–254.

Jaskari, M.-M. (2013). Using pictorial collages in user-centred construction of a creative and effective learning environment. In Veer, Ballantine, P. W. & Ozanne, L. K.(Eds). *Asia-Pacific Advances of Consumer Research*. Association for Consumer Research 10, 284–292.

Jaskari, M.-M. (2012). Teaching the fuzzy front end of innovation: real-life application with cross-functional and international teams. In Robinson, Jr., L. (Ed.). *Marketing Dynamism & Sustainability: Things Change, Things Stay the Same... Proceedings of the Annual Conference of the Academy of Marketing Science* 314–322.

Jaskari, M.-M. (2013). The challenge of assessing creative problem solving in client-based marketing development projects: A SOLO taxonomy approach. *Journal of Marketing Education* first published on April 29, 2013 as doi:10.1177/0273475313485586.

Jaskari, H. & Jaskari, M.-M. (2013). Client-based teaching of strategic sales management - comparing face-to-face and web-based formats. In McCabe, D. B. & Black, G. S. (eds). 2013 *Conference Proceedings of the Annual Marketing Education Conference: New Challenges and Opportunities*, Marketing Educators Association 97–109.

John, J. & Needel, M. (1989). Entry-level marketing research recruits: what do recruiters need? *Journal of Marketing Education* 11: 1, 68–73.

Kasanen, E., Lukka, K. & Siitonen, A. (1993). The constructive approach in management accounting research. *Journal of Management Accounting Research* 5: 1, 243–264.

Kayes, A. B., Kayes, D. C. & Kolb, D. A. (2005). Experiential learning in teams. *Simulation Gaming* 36: 3, 330–354.

Kelley, C. A. & Gaedeke, R. M. (1990). Student and employer evaluation of hiring criteria for entry-level marketing positions. *Journal of Marketing Education* 12: 3, 64–71.

Kemmis, S. & Wilkinson, M. (1998). Participatory action research and the study of practice. In (B. Atweh, S. Kemmis & P. Weeks (Eds). *Action Research in Practice. Partnership for social justice in education*. London: Routledge.

Kemmis, S. & McTaggart, R. (2000). Participatory action research. In Norman K. Denzin & Yvonna S. Lincoln (Eds). *Handbook of Qualitative Research* 2nd edition, London: Sage, 567–605.

Kennedy, E. J., Lawton, L. & Walton, E. (2001). The case for using live cases: Shifting the paradigm in marketing education. *Journal of Marketing Education* 23: 2, 145–151.

Kim, J. & Wilemon, D. (2002). Strategic issues in managing innovation's fuzzy front-end. *European Journal of Innovation Management* 5: 1, 27–39.

Kiviniemi, K. (1999). Toimintatutkimus yhteisöllisenä prosessina. In Heikkinen H.L.T., Huttunen, R. & Moilanen, P. (Eds). *Siinä Tutkija Missä Tekijä, Toimintatutkimuksen perusteita ja näköaloja*. Jyväskylä: Atena kustannus, 63–83.

Kolb, D. A. (1984). *Experiential learning: Experience as a source of learning and development*. Engelwood Cliffs, NJ: Prentice-Hall.

Kolb, A. Y. & Kolb D. A. (2005). Learning styles and learning spaces: enhancing experiential learning in higher education. *Academy of Management Learning & Education* 4: 2, 193–212.

Kotler, P. & Armstrong, G. (2004). *Principles of Marketing*. Tenth edition, Upper Saddle River: Pearson Prentice Hall.

Kotter, J. P. (2012). Accelerate! How the most innovative companies capitalize today's rapid-fire strategic challenges – and stills make their numbers. *Harvard Business Review* 90: 11, 44–58.

Kretovics, M. A. (1999). Assessing the MBA: what do our students learn? *Journal of Management Development* 18: 2, 125–136.

Ladkin, D. (2004). Action research. In Seale, C., Gobo, G., Gubrium, J. F. & Silverman, D. (Eds.). *Qualitative Research Practice* 536–548.

Lehrer, J. (2012). *Imagine: How Creativity Works*. New York: Houghton Mifflin Harcourt Publishing Company.

Levander, L. (2002). Reflektio yliopisto-opettajan työssä. In Lindblom-Ylänne, S. & Nevgi, A. (Eds). *Yliopisto- ja korkeakouluopettajan käsikirja*. Helsinki: Wsoy, 452–467.

- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues* 2: 4, 34–46.
- Levitt, T. (1963/2002). Creativity is not enough. *Harvard Business Review* 80: August, 137–144.
- Li, T., Greenberg, B. A. & Nicholls, J. A. F. (2007). Teaching experiential learning: adoption of an innovative course in an MBA marketing curriculum. *Journal of Marketing Education* 29: 1, 25–33.
- Lincoln, D. J. (2010). Is marketing education “producing” the right product (student) for today’s job market? Maybe. In Cadwallader S. & Brodowsky, G. H. (Eds). *The Pinnacle of Marketing Education, Proceedings of the Marketing Educators’ Association Conference 2010*, 124–127.
- Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic Inquiry*. California: Sage Publications.
- Lopez, T. B. & Lee, R. G. (2005). Five principles for workable client-based projects: lessons from the trenches. *Journal of Marketing Education* 27: 2, 172–188.
- Love, E., Stone, D. E. Jr. & Wilton, T. (2011). Teaching user-centered design in new product development. *Marketing Education Review* 21: 1, 29–33.
- Lovejoy, W. S. & Srinivasan, V. (2002). Perspective: ten years of experience teaching a multi-disciplinary product development course. *Journal of Product Innovation Management* 19: 1, 32–45.
- Lundström, W. J. & White, D. S. (1997). A gap analysis of professional and academic perceptions of the importance of international marketing curriculum content and research areas. *Journal of Marketing Education* 19: 2, 16–25.
- Lunsford, D. A. (1990). Developing creative problem solving skills in marketing case analysis. *Marketing Education Review* 1: 3, 62–69.
- MacGregor, J., Cooper, J., Smith, K. & Robinson, P. (Eds.) (2000). *Strategies for energizing large classes: From small groups to learning communities: New directions for teaching and learning*. San Francisco, CA: Jossey-Bass.
- Malmi, T. (2005). Kohti käytännöllisiä teorioita liiketaloustieteissä – toiveajatteluko? *Liiketaloudellinen Aikakauskirja* 4: 05, 553–559.
- Marshall, J. (2011). Images of changing practice through reflective action research. *Journal of Organisational Change Management* 24: 2, 244–256.
- Marshall, K. P. & Pearson, M. M. (2007). A spreadsheet pricing model approach to teaching practical pricing concepts in the marketing classroom. *Marketing Education Review* 17: 1, 87–93.

- Martinsuo, M. (2009). Teaching fuzzy front end of innovation: experimenting with team learning and cross-organisational integration. *Creativity and Innovation Management* 18: 3, 147–159.
- McCabe, C. & Grant, K. M. (2007). Making marketing history: an interdisciplinary team teaching approach. *Marketing Education Review* 17: 1, 15–20.
- McCabe, D. B. & Meuter, M. L. (2011). Student view of technology in the classroom: does it enhance the seven principles of good practice in undergraduate education? *Journal of Marketing Education* 33: 2, 149–159.
- McCole, P. (2004). Refocusing marketing to reflect practice: the changing role of marketing for business. *Marketing Intelligence & Planning* 22: 5, 531–539.
- McCorkle, D. E. & McCorkle, Y. L. (2012). Using linkedin in the marketing classroom: exploratory insights and recommendations for teaching social media/networking. *Marketing Education Review* 22: 2, 157–166.
- McCorkle, D. E., Reardon, J., Alexander, J. F., Kling, N. D., Harris, R. C. & Iyer, R. V. (1999). Undergraduate marketing students, group projects, and teamwork: the good, the bad, and the ugly? *Journal of Marketing Education* 21: 2, 106–117.
- McCorkle, D. E., Alexander, J. F., Reardon, J. & Nathan D. Kling, N. D. (2003). Developing self-marketing skills: are marketing students prepared for the job search? *Journal of Marketing Education* 25: 3, 196–207.
- McCorkle, D. E., Payan, J. M., Reardon J. & Kling N. D. (2007). Perceptions and reality. creativity in the marketing classroom. *Journal of Marketing Education* 29: 3, 254–261.
- McIntyre, F. S., Hite, R. E. & Rickard, M. K. (2003). Individual characteristics and creativity in the marketing classroom: exploratory insight. *Journal of Marketing Education* 25: 2, 143–149.
- McIntyre, R.P. (1993). An approach to fostering creativity in marketing. *Marketing Education Review* 3: 1, 33–36.
- McKinsey & Company (2006). Global survey of business executives. *The McKinsey Quarterly*. March 2006.
- McNiff, J. & Whitehead, J. (2006). *All you need to know about Action Research*. London: Sage.
- Michane, J. & Breiler, A. (2009). *The Idea Agent. A Handbook on Creative Processes*. Malmö: Idélaboratoriet.
- Middleton, B. & Long, G. (1990). Marketing skills. Critical issues in marketing education and training. *Journal of Marketing Management* 5: 3, 325–342.

- Miettinen, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education* 19: 1, 54–72.
- Miles, M. B. & Huberman, A. M. (1984). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.
- Monroe, K. B. (2003). *Pricing. Making Profitable Decision*. Third edition. New York: McGraw-Hill.
- Moon, M. A. (1999). MBA Marketing education in the 21<sup>st</sup> century: The challenges from technology. *Marketing Education Review* 9: 2, 1–5.
- Murphy, S. A. & Kumar, V. (1996). The role of predevelopment activities and firm attributes in new product success. *Technovation* 16: 8, 431–441.
- Nevgi, A. & Lindblom-Ylänne, S. (2009). Oppimisen teorian. In Lindblom-Ylänne S. & Nevgi A. (Eds). *Yliopisto-opettajan käsikirja*. Helsinki: Wsoy, 194–236.
- Ng, I. C. L. (2006). Photoessays in the teaching of marketing. *Journal of Marketing Education* 28: 3, 237–253.
- Neelankavil, J. P. (1994). Corporate America's quest for an ideal MBA. *Journal of Management Development* 13: 5, 38–55.
- Nickerson, R. S. (1999). Enhancing creativity. In Robert J. Stenberg (Ed.). *Handbook of Creativity*. New York: Cambridge University Press. 392–430.
- O'Brien, E. M. & Deands, K. R. (1995). The position of marketing education: a student versus employer perspective. *Marketing Intelligence & Planning* 13: 2, 47–52.
- O'Connor, G. C. & DeMartino, R. (2006). Organizing for radical innovation: an exploratory study of the structural aspects of management systems in large established firms. *Journal of Product Innovation Management* 23: 6, 475–497.
- Opinto-opas (2007–2008). Vaasan yliopisto. Kauppatieteellinen tiedekunta. [Study guide, University of Vaasa, Faculty of Business studies].
- Opinto-opas (2011–2012). Vaasan yliopisto. Kauppatieteellinen tiedekunta. [Study guide, University of Vaasa, Faculty of Business studies].
- Parpala, A., Lindblom-Ylänne, S., Komulainen, E., Litmanen, T. & Hirsto, L. (2010). Students' approaches to learning and their experiences of the teaching-learning environment in different disciplines. *British Journal of Educational Psychology* 80, 269–282.

- Parry, S. (1998). Disciplinary discourse in doctoral theses. *Higher Education* 36, 273–299.
- Petkus, E. Jr. (2000). A theoretical and practical framework for service-learning in marketing: Kolb's experiential learning cycle. *Journal of Marketing Education* 22: 1, 64–70.
- Phillips, E. M. & Zuber-Skerritt, O. (1993). Perceptions of educators and potential employers of the research training needs of postgraduates in business and management. *Journal of Management Development* 12: 5, 12–20.
- Piaff, E. & Huddleston P. (2003). Does it matter if i hate teamwork? What impacts student attitudes toward teamwork. *Journal of Marketing Education* 25: 1, 37–45.
- Proserpio, L. & Gioia, D. A. (2007). Teaching the virtual generation. *Academy of Management Learning & Education* 6: 1, 69–80.
- Ramocki, S. P. (1996). Developing creative marketing graduates. *Marketing Education Review* 6: 1, 47–53.
- Ramocki, S. P. (2007a). A critical challenge awaiting marketing education. *Marketing Education Review* 17: 3, 11–20.
- Ramocki, S. P. (2007). Metacognition and transfer: Keys to improving marketing education. *Journal of Marketing Education* 29: 1, 18–24.
- Razzouk, N. Y., Seitz, V. & Rizkallah, E. (2003). Learning by doing: Using experiential projects in the undergraduate marketing strategy course. *Marketing Education Review* 13: 2, 35–41.
- Reason, P. & Bradbury, H. (eds) (2001). *Handbook of Action Research: Participatory Inquiry and Practice*. London: Sage.
- Reeves, M., Love, C. & Tillmanns, P. (2012). Your strategy needs a strategy. *Harvard Business Review* 90: 9, 76–83.
- Reynolds, M. (1997). Learning styles: A critique. *Management Learning* 28: 2, 115–133.
- Rossiter, J. R. (2001). What is marketing knowledge? Stage I: forms of marketing knowledge. *Marketing Theory* 1: 1, 9–26.
- Rossiter, J. R. (2002). The five forms of transmissible, usable marketing knowledge. *Marketing Theory* 2: 4, 369–380.
- Saarikoski Maria (2004). *Ekonomit liiketoimintaosaamisen huipulla: katsaus koulutukseen ja työmarkkinoihin*. SEFEn raportteja 3.



- Schibrowsky, J. A., Peltier, J. W. & Boyt, T. E. (2002). A professional school approach to marketing education. *Journal of Marketing Education* 24: 1, 43–55.
- Schlee, R. P. & Harich, K. R. (2010). Knowledge and skill requirements for marketing jobs in the 21st century. *Journal of Marketing Education* 32: 3, 341–352.
- Schön, D. A. (1983). *The Reflective Practitioner. How Professionals Think in Action*. London: Ashgate.
- Sefe (2011). *Työnantajien arviot kauppaliiketoimintojen maistereiden ja kandidaattien osaamisesta ja kilpailukyvyistä suomalaisilla työmarkkinoilla*. Sefen raportteja 1, Sefe.
- Shipp, S., Lamb, C. W. Jr. & Mokwa, M. P. (1993). Developing and enhancing marketing students' skills: written and oral communication, intuition, creativity, and computer usage. *Marketing Education Review* 3: 3, 2–8.
- Shuell, T. J. (1986). Cognitive conceptions of learning. *Review of Educational Research* 56: 4, 411–436.
- Smart, D. T., Kelley, C. A. & Conant, J. S. (1999). Marketing education in the year 2000: changes observed and challenges anticipated. *Journal of Marketing Education* 21: 3, 206–216.
- Sneed, J. & Morgan, D. A. (1999). Deficiencies in communication and problem-solving skills of business graduates: is the business curriculum at fault? *Management Research News* 22: 8, 225–232.
- Song, X. M., Neeley, S. M. & Zhao, Y. (1996). Managing R&D–marketing integration in the new product development process. *Industrial Marketing Management* 25: 6, 545–553.
- Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. *Journal of Consumer Research* 21, 491–503.
- Stegemann, N. & Sutton-Brady, C. (2009). Poster sessions in marketing education: An empirical examination. *Journal of Marketing Education* 31: 3, 219–229.
- Stenberg, R. J. & Lubart, T. I. (1999). The concept of creativity: prospects and paradigms. In Stenberg, R. J. (Ed.). *Handbook of Creativity*. New York: Cambridge University Press, 3–15.
- Stern, B. L. & Tseng, L. P. D. (2002). Do academics and practitioners agree on what and how to teach the undergraduate marketing research course? *Journal of Marketing Education* 24: 3, 225–232.
- Strauss, J. (2011). Marketing capstone models *The Apprentice* television show with client-sponsored projects. *Journal of Marketing Education* 33: 3, 312–325.

- Stringer, E. T. (2007). *Action Research*. Third edition. Thousand Oaks: Sage Publications.
- Tanyel, F., Mitchell M. A. & McAlum, H. G. (1999). The skill set for success of new business school graduates: Do prospective employers and university faculty agree? *Journal of Education in Business* 75: 1, 33–37.
- Tassoul, M. (2009). *Creative Facilitation*. Delft, VSSD.
- Taylor, K. A. (2003). Marketing yourself in the competitive job market: an innovative course preparing undergraduates for marketing careers. *Journal of Marketing Education* 24: 3, 225–232.
- Titus, P. A. (2000). Marketing and creative problem-solving process. *Journal of Marketing Education* 22: 3, 225–235.
- Titus, P. A. (2007). Applied creativity: The creative marketing breakthrough model. *Journal of Marketing Education* 29: 3, 262–272.
- Tuomi, J. & Sarajärvi, A. (2003). *Laadullinen tutkimus ja sisällönanalyysi*. Jyväskylä: Tammi.
- Ulinski M. & O’Callaghan, S. (2002). A comparison of MBA students’ and employers’ perceptions of the value of oral communication skills for employment. *Journal of Education for Business* 77: 4, 193–197.
- Uncles, M. (2002). From marketing knowledge to marketing principles. *Marketing Theory* 2: 4, 345–353.
- Vironmäki, Emma (2007). *Academic Marketing in Finland. Living up to conflicting expectations*. Acta Societas Oeconomorum, 2, Helsinki: Suomen Ekonomiliitto.
- Vogel C. M., Cagan, J. & Boatwright, P. (2005). *The Design of Things to Come. How Ordinary People Create Extraordinary Products*. Upple Saddle River, New Jersey, Wharton School Publishing.
- Wadsworth, Y. (1998). *What Is Participatory Action Research*. Action Research International, Paper 2. Available on-line: <http://www.scu.edu.au/schools/gcm/ar/ari/p-uwadswotr98.html> [Cited 2-May-2011].
- Walker, I., Tsarenko Y., Wagstaff, P., Powell, I., Steel, M. & Brace-Govan, J. (2009). The development of competent marketing professionals. *Journal of Marketing Education* 31: 3, 253–263.
- Wellman, N. (2010). The employability attributes required of new marketing graduates. *Marketing Intelligence & Planning* 28: 7, 908–930.
- Whyte, William F. (Ed.) (1991). *Participatory Action Research*. London: Sage.

Wiese, N. M. & Sherman, D. J. (2010). Integrating marketing and environmental studies through an interdisciplinary, experiential, service-learning approach. *Journal of Marketing Education* 33: 1, 41–56.

Woodridge, B. R. (2006). The power of perception an active/experiential learning exercise for principles of marketing. *Marketing Education Review* 16: 2, 5–7.

Woodruff, R. B. & Craveans, D. W. (1990). Challenges for graduates marketing education in the twenty-first century. *Marketing Education Review* 1: 1, 34–44.

Ylijoki, O.-H. (2000). Disciplinary cultures and the moral order of studying – A case-study of four Finnish university departments. *Higher Education* 39: 3, 339–362.

Young, M. & Murphy, J. W. (2003). Integrating communication skills into the marketing curriculum: A case study. *Journal of Marketing Education* 25: 1, 57–70.

Young, M. R. (2002). Experiential learning = hands-on + minds-on. *Marketing Education Review* 12: 1, 43–51.

## APPENDICES

### Appendix 1

#### Description of Concept Factory courses 2007–2012

During the action research (2007–2012) the Concept Factory is run eight times. Each course is described below.

##### 1. Several practical real life cases

The first pilot course for Concept Factory was run 2007–2008. Even though the name Concept Factory was new, there had been a history of integrative marketing courses that had similar objectives. However, this was the first time when I as a teacher and researcher started working on a project. During the first year the aim was to capture experiential learning into the course by developing real life client based projects with consultative coaching. The practical client based projects within courses had not been typical and thus the focus was put to finding suitable clients. The teacher negotiated the project aim and objectives with the client in order to keep the problem challenging and meeting the learning outcomes of the course.

There is a challenge finding suitable clients that have time to work with students, their developmental task suits the course content and that bear the fact that working with students is not the same than working with consultants, because different groups may reach different level of results. Motivated, inspired students can reach results better than any consultant, however sometimes the students just disappear, do not even take responsibility to let the teacher know, they have dropped out of the course. At the time when agreeing on objectives with the client the teacher may not know what kind of students will enroll to the course and what is their attitude and motives towards taking up the challenge and completing the course. Thus, based on the teacher's earlier experience on client based projects with students, a three step method for problem formulation was developed.

The aim of the project was agreed on focusing on a marketing development challenge faced in the case company. The first objective focuses on theoretical understanding of the problem. The second objective focuses on empirical work and gaining customer insight. The students were asked to find new information about the customer or other parties needed in the development work. We even encourage that this raw data is given to the client, so that if the students do not notice all relevant ideas to the context, the client may interpret the data himself. When these

two objectives were met, the student was able to pass the course. Also the client will gain new knowledge and ideas. The pearl is in the third objective that focuses on creating new marketing concepts. This objective is introduced to the client as possible, but uncertain, depending on the students. For the students it requires taking up the challenge and really making the effort. It is not about finding information but about interpreting and creating something new in a given context. This third objective gives flexibility for client, teachers and students that is needed when working on client based projects in school environment.

Another focus for the first year was to look deeper into coaching process, how should the client-based projects to be coached. The aim was to bring practical project work in client-based projects into students' curriculum.

Altogether 23 students enrolled to the course. The students worked in pairs, one student alone. This was due to two things. First of all, there had been some bad experiences on team work in larger teams, as there had been too much students not doing their part of the project. Second, there were so many clients willing to participate that it was easy to form students to work in pairs. Also, students were able to work on their own business ideas and indeed, during the first year there were two such projects.

The students also have a possibility to develop their own business ideas during the course. The first year we had two of two of those; a sports shop and a sauna heating product. Altogether twelve projects were completed during the first year. The clients were Kristallikuvio, Sauna-Seita, Merenkurkku travel agency, Fishing net producer Lindeman, City of Vaasa (2 projects), Sports shop PeLo-Sport, Muova (2 projects), Pilkkoset, Malmihaan Hevoskylä and Woodpoint.

The course was run between 12–16 weeks depending on students' project plan. The teams met weekly in Muova's premises where all the projects were discussed as in project meeting. This aimed at developing the presentation and communication skills, to give peer support and to imitate the real life practices in the project organization. The final meeting was a small scale seminar where some students presented their outcomes for business and university audience. During the course the students wrote a personal learning diary where they reflected on what they had done and learnt. After the course the teacher interviewed clients about the success of the student work and how to continue developing the course concept.

All the projects were client based and real life, there were completed and the first process model for teaching these kinds of courses were developed. Thus the first goal to form the understanding of the process as a whole was reached. However, even if there was emphasis put on coaching the students, several different kinds of

cases made it difficult to coach. Also some of the students thought some projects were easier or more difficult and it was difficult for them to see the similarities between the projects. Thus the coaching emphasized the process coaching. Two different conference papers were written based on this development work, the other one emphasized the holistic model of experiential learning and the second one emphasized more the different kinds of coaching processes within the course. Essay 1 is a later version of these two conference papers.

For the teacher one of the main challenges was to enhance the processes so, that the students really took responsibility of their own projects as they were responsible for the clients as well. Partly this was done by moving the lectures into the new premises, more work-a-like space, to Muova. Students could not use their “university role” but had to rethink their role and this was used to try to move them to different “mode” to “working role”. For the teacher there was a lot of learning about coaching process.

## 2. Many projects and developing the physical learning environment

The second course was run in autumn 2008. Last time the premises of Muova had worked well in order to change the working role of the students and we continued working at Muova premises. Some student projects were also done for Muova’s other projects. A special interest was given to learning environment, physical, social, psychological and virtual. Muova was a partner in developing a physical environment inside Muova premises and one student group together with a teacher focused on understanding the student perspective in learning environments (Essay 2).

Again, we were working with many small projects at the same time. The students were divided into teams of 3–4 people and each team got their own client project. The developmental projects were different in each case and also on different levels, thus also the project plans varied from 12–16 weeks. For example students working with Pilkkoset, got a very practical hands-on brief for customer analysis. The client was eager to guide the process throughout the course and gave very practical and specific instructions for the students. This helped the students to do exactly what the client wanted and they got a good feeling on how to work in such projects. However, their own possibilities to work on the problem openly and innovating different solution were minimal. On the other hand, Muova gave free hands for the students within their energy consumption project. They needed to look into the customer groups and to gain deep insight, however, the students were asked to frame the problem themselves. The students felt the problem formulation was difficult and partly frustrating. It was difficult to grasp the whole. The other client projects (Foto-Björndal, Kvarken) were somewhere in-between.

This balancing between the abstract and concrete problem for starting point was one of the main learning points for this year. The more concrete and systematic the developmental challenge is, the easier it is for the students to start working on it. However, a lot of decisions have been made for the students and the task may look neat and tidy, clear and easy to complete. In master level studies, however, the students should learn about uncertainty and complexity and be able to formulate the problems themselves taking different perspectives into account. However, those projects are often very challenging for the students because they do not know, what should be done and sometimes they just give up. Thus the background processes and coaching are important. However, even though coaching can help them; the coach must not give the answers either, but help the student to find solutions themselves. The second option is what I was looking for and thus after this year, the prerequisite for the course was changed so that the students were expected to have completed their bachelor thesis and thus this course became clearly a master's level course.

A special feature of this year was a concept development for student – centred learning environment. The teacher helped the group with problem formulation and data gathering (visual collages and Zmet –technique was used for all the students within the course). After the data gathering the students continued by themselves, and created to innovative concepts for the learning environment. The group even started to act according to their findings, building team spirit and making coffee for all the others. In a way this project empowered them and the morning coffee became a part of the process. The group interview data was also given to the teacher, who later analyzed and used it in writing the essay 2. Altogether this was done in a spirit of participatory action research (Whyte 1991).

Later on the building of physical learning environment was put down due to budget constraints. The ideas of learning environment were understood in a more holistic view and taken into consideration wherever the teaching took place. Later on, year 2012, the university of Vaasa decided to build new classrooms for students that would enhance not only teacher perspective, but social aspects as well and the understanding of the student perspective into learning environment was used in that development project, where the teacher-researcher was also part of.

### 3. A small but a challenging group of marketing students

Autumn period 2009 only eight students enrolled to Concept Factory. This was due to the fact that a year earlier a huge amount of student had graduated because of the national renewal of academic degrees. The students were first divided into two teams, but there was right in the beginning a strange discussion and negotiation about different option for creative work and what options would be easier

than others. Because of this, I decided to divide the teams again so that each team of four people were subdivided into two. Still, each team had their client, but sub teams looked into different aspect of that case. The cases were Muova's boating industry project and University of Vaasa's brand management project.

The structure was similar as other courses. The teams had regular meetings at Muova resembling working life project meetings. They had to present what they had done after last meeting, how they were going to continue and what kind of challenges they had met. At this time the student groups really struggled on getting started with the projects. They didn't at first take responsibility of running the project and waited for the teacher to tell them what to do. The coaching process was important but at the same time there were so many other things going around, that the coaching was not enough.

Indeed, this course made me realize the strength of positive group dynamics, and the challenges that we face, when all seem to go bad. Earlier years, the group dynamics and atmosphere was mostly positive – roughly over half of the students really wanted to solve the demanding development problems. Those who were less motivated, got inspired by the others and carried on and were able to reach quite fine results. So the enthusiastic groups spread the inspirational feeling around them. This year all the groups started out in a weird feeling, and the negative atmosphere was really difficult to turn into positive one. The other group started to work well, and after interviewing some professionals and customers, they got inspired by the work and did well. The other group did not really ever start and even the first groups advised them to "just sit and work". In the end I had to fail the other two groups and then the other one of those starting working – on a complaint. This made the course very stressful and challenging for the teacher during and after the course.

As might be guessed that the results and the feedback of the course were two-fold. The two groups working on a boat project succeeded well in the end and were also able to critically reflect their learning in learning diaries. The other two groups did not do well, they were failed.

This year also made me think about the role of going into empiria as the groups that succeeded really started working when visiting empiria. This seems to be a very important phase in the project. They started to understand more deeply about the problems surrounding their case and they understood the client's problem better. At the same time they gain more understanding about the complexity of the real life problems and see how many different options there is to apply marketing knowledge. Indeed, it looked as gaining insight from empiria (customers, partners, professional) was the phase that made the project their own, they got the



final ownership of the project. They were able to present context dependent information that only they knew. They also might have understood the use of their knowledge to the case. Maybe this is what builds the starting point for successful work that leads to an experience of confidence. The brand groups never stepped into empiria in a real sense, the project was never theirs.

After this year also some specific changes were made. First, the project time was restricted to two terms (autumn). Because the projects had been so different, some of them had been scheduled to finish after Christmas holidays. However, in each year, student groups that had to start again after Christmas had often problems in continuing the work. I decided to keep the project time shorter and more intense. Also, the ects for the students was able to vary between 4–10 and later 5–15. This was difficult for the students to understand. Thus, I explicitly said that the projects aim at 12 points, but there may be differences if the work I done really well or poorly.

#### 4. The Future Fair

In spring 2010 we organized an extra Concept Factory – a pilot course as part of the Responsible Market Driven Design (RMDD) -project. The aim of this Botnia-Atlantica funded -project was to find ways to cooperate together across Kvarken with marketing and design and build an ongoing collaboration.

Within this cooperation we run two courses and in both cases the Concept Factory was the counterpart in Finland. The first international student cooperation project, The Future Fair, was organized in spring 2010. The client for the project was Swedish trade fair organizer Nolia. From Sweden, twenty international student taking part in a one year long course Introduction to Industrial Design participated to the course. From Finland we organized an extra course and got seven students to participate. The time for Finland was difficult, May, as many students had already left for summer jobs. These students were then divided into five multicultural and cross-functional teams.

In their assignment, each team needed to use the methods of user centered product development and develop new fair concepts for the future. The working time was set to five weeks, it started with a joint meeting in Umeå, where the students formed their teams, heard lectures form the client and worked together. They visited the spring fairs in Sweden or in Finland, draw customer journeys and gained deep customer insight. After two weeks there was another meeting in Vaasa, in between the students worked together virtually using different internet platforms. The student groups were guided both in Sweden and in Finland on the design process as well as teamwork.

As a result of the project each team had at least three different concepts for the future fair. Some of them were merely incremental innovations that would enhance the customer experience, where as some groups reached the level of radical innovations as they moved the whole fair from mainland to the floating area that could be transferred from place to place. The outcome and the process of the student work was assessed according to students' home university, but discussed together with the teachers. The Finnish students also reflected their learning by writing individual learning diaries.

One starting point for concept development worked well. Indeed, one of the learning experiences for the students is the understanding, how different concept may evolve from the same starting point. This also emphasizes the uncertainty and relativity of marketing. Methodologically the course was very innovative for marketing students as design students used a lot of different kinds of specific creativity tools that were not familiar for the Finnish students.

In this first project the Finnish marketing students became part of the design students groups that were cross-functional already in their earlier studies. The aim was to equally learn design thinking and service design. However, the feedback showed how the students became uncertain, what was their role in the project. Also, due to the ash cloud in Northern European sky at that time, the Finnish students were late for one day from the start of the course, but the Swedish students started working already and for some students it was difficult to find their place in a group. Perhaps this resulted in some problems in teams later on. Also, as there were only seven Finnish students in this first pilot (one to two in each group), the Swedish students were not dependable of them and this might have partly resulted to problems in some group.

## 5. New Festivals in Vaasa

Another RMDD – student project, New Festivals in Vaasa, was run in autumn 2010 together with city of Vaasa. The starting point was a real life situation, where the local rock festival Rockperry had finished and it raises the question – what after Rockperry? What kinds of festivals or events would attract people to visit Vaasa?

Seventeen design students and seventeen marketing students took part to this course. This time the structure was such, that the Swedish students had their own course on design workshop that was implemented as a part of our Concept Factory. Thus, the design students came with their design background and worked professionally with marketing students that represented more the customer and business point of departure. The students worked together 24/5 for one very intensive

working week. First the Swedish students came to Finland where the start of the course, teambuilding and client lectures was done. They organized workshops for themselves and for outside people. They developed early concepts, evaluated them on a boat on a way to Sweden and continued working with those concepts in Umeå. Finally in Friday morning they presented three strong concepts. After this the Finnish students continued testing the concepts, evaluating them and choosing or combining them to make one strong concept. They interviewed professionals about their concepts and developed them further to be as practical as possible. For this concert their built a business plan. As a result of this course there were six service concepts and business plans developed: I love biking – a biking festival in Vaasa region, Harbour meeting – a stressless jazz meeting by the sea, Vaasa Fuzion – business meeting with pleasure for energy cohortion, Wasa Film Festival – an outdoor event, Art & Design Vaasa – a place for young artists to perform and St. Maria’s feast – fine dining at the ruins of old Vaasa.

In the end of the project the Finnish students presented the concepts to professional client jury, where there were participants from Western-Finland Design Centre, Muova, City of Vaasa and University of Vaasa. The jury heard small “pitch talk” about the concept after which they had to evaluate the usefulness of the concept. They gave points along with the famous tv – reality show “Dances with stars”. The winner won a box of chocolate. Again in this project, the students were marked according to their home university’s criteria.

This time we used quite a bit of time in team building in order to make them feel as a team and realize each other’s knowledge and skills. This worked well and as the time passed, one of the groups organized a visit to the country side and wine factory for all groups to celebrate the end of the course.

In this second project we decided to enhance the professional roles of the students, designers as designers and marketers and marketers. They found it easier to give input to the process and also they started thinking themselves what does it mean to be a designer or a marketer. We explored this also in feedback forms and found that this made professional identity more clear for both professions. This was such an interesting founding that I looked deeper into this in essay 4 that aims at understanding how the marketing students make sense of their professional identity.

After this course the process started to spread inside the university as one of the students was a teacher in different faculty, got inspired of the method and started using this process also in her course. Eventually this led to cooperation where she was a co-teacher in the next project.

Altogether the two projects with Umeå Institute of Design enhanced the creative phases of the development processes. Also, from this experience, I decided to start working with only one client during one course. This is useful in several reasons. First of all, teacher can use more resources in planning the process well in one client that trying to go through up to twelve. Second, the level of the problem is easier to handle as only one client takes part. Third, the client gets more ideas. Fourth, for the students it is valuable to see, how different final concepts are developed from one starting point.

The two international student projects were challenging in many ways, but they enhanced the experience in cross-functionality and internationality in real life projects. A more detailed course design together with student and teacher experiences are reported in essay 3.

## 6. Marketing a region – Ostrobotnia

In autumn 2011 I started working with one client more deeply. The client was the regional Council of Ostrobotnia and the object was to attract regional students to stay in the area after graduation. The project was a subproject from a larger marketing project that was going on in Regional Council of Ostrobotnia. The brief was planned together with client and this time the client was closely involved to our course. They attended several meetings, weekly meetings with the students, final jury and gave comments in later phase.

The student group was a cross-functional group. They were divided into six cross-functional teams, where each had marketing, communication and Finnish students. Altogether there were 29 students attending the course. As learnt from previous years, the different professional roles of the students were explicitly discussed.

Based on a client's brief, the students had to create concepts for integrated marketing that would attract students to stay in the region after graduation. This challenge was linked into another project of marketing Ostrobotnia. The concept had to be reusable yearly basis with low costs, the budget for the whole campaign was 50 000 euros. The development process was supported by personas workshop, professional coaching and weekly meetings where the students presented their phase and challenges. As in real life, several coaches were able to give different perspectives to the development process. However, this was very stressful for some of the students as it made their work more complex and uncertain. The course ended up with final show, where the students presented their work to the professional jury.

The students reflected on their learning in their individual learning diaries. It was specified to cover 2 ects and there were more questions to consider in different phases of the process. With this the aim was to enhance the construction of professional identity.

This project got a wide media coverage in regional media and some of the concepts were introduced in local newspapers, webpages and in local television. The client evaluated the concepts and found usable parts in most suggestions. Afterwards they offered a summer job for one of the students.

#### 7. Value Factory – independent group work

In autumn 2011 there were more students enrolling to the course than anticipated. As the group work was restricted to only 15 marketing students, some of them were offered to work in more independent groups, still working on a client-based project. There was guidance for each group but not in all independent groups together. The guidance was focused to the coaching process. Five independent groups were formed. There were four clients: a new innovative health product company Stabilic (two groups), Rock Club Rytmikorjaamo, City of Vaasa (Art school) and a sales promotion company Divisioona. The learning objectives, methods and assessment were the same as for the other group. Also these students wrote individual learning diaries. All the groups were asked to visit the teacher regularly to discuss the project and how it was developing. The coaching process was similar than in the other course.

The five groups worked independently. The best group was able to take initiative and responsibility for their case and looked for new solutions for themselves. The coaching for them was more about discussing about different options and which way to go. Three groups worked well but were eager to ask what to do next. They were eager to complete the task, but they had difficulties in opening up the problem area from different perspectives. They wanted someone to tell them what to do. One group, even though they were eager to do the job, had difficulties in finding the master's level challenge and aimed at lower level solutions for the company. Some students didn't show up for the guiding sessions, there seemed to be some difficulties in group dynamics. However, even they were able to reach a fair solution for the company.

Compared to the regular Concept Factory, where the groups share the knowledge and push each other forward, the results are slightly lower. However, the best group worked very well independently. The mid-level groups and the last group would have gained more if attending to group meetings each week. Indeed, the

common assignment and interaction both in a group and between groups seem to enhance understanding the contextual and relative aspects of the clients situation.

#### 8. Stundars – marketing open air museum for children and their families

In autumn 2012 we continued working with communication students. The client for this course was an open-air museum in the countryside that wanted to attract more families with children to visit their grounds not only once but several times during the summer. The students received a two-page brief explaining the current situation of the museum, the objective of the student work, and resource constraints. Thus the starting point for all the groups was the same. The course followed the outline presented earlier. The students came up with six distinct final concepts that they both presented orally and reported in writing.

Altogether 25 students participated in the course, of whom 14 were marketing students and 11 communication and language students. There were six cross-functional teams and thus six final reports. The students presented their work several times during the course. The teacher took notes during the presentations and provided feedback to the teams. These notes together with the presentation material serve as data along with the final reports. Further, each student wrote an individual learning diary during the course in order to develop their metacognitive and learning-to-learn skills. The final assessment was based 20% on the outcome, 60% on the process and 20% on the communication skills and presentation. The learning diaries were assessed separately.

## Appendix 2

## Evaluation of six final concepts from autumn 2012

<i>Name of the concept</i>	<i>Description of the final concept</i>	<i>Evaluation of the outcome</i>	<i>Evaluation of the process</i>
<b>Concept 1.</b> <b>“Genuine life”</b>	<i>The final concept integrates several new activities and services in the area. The concept is built on three ideas: being natural, close, and easy to access. It includes both activities targeted at the expected target group and new activities to attract new potential target groups that would generate substantially more income for the museum. The final concept enables wide cooperation between different actors in the region and thus provides potential value for many different parties.</i>	The structure of the outcome is a coherent, integrated whole that provides novelty, usefulness, and value for several parties, namely the client, potential customers, and other service providers in the area, such as farmers. The concept has unexpected potential to generate new business opportunities. The outcome was clearly developed from the students’ own ideas, which they honed on the basis of feedback from the teachers.	In the development process, the team worked eagerly and was motivated to finish the project in an exemplary manner. The development process was explorative, deep, rich, and holistic. The process included sourcing customer data from multiple sources and using that data as bases of idea generation and evaluation. For example, the students designed a little pig mascot that the museum can use both in its marketing and on its premises. The group was brave and able to “let go” in the creative process, welcoming new ideas, testing different ideas, and working hard toward a coherent marketing concept. At the same time they were able to tackle inconsistencies and aim for coherent closure. In their final presentation they suggested one concept that fit the resource limitations given by the client, but left some options open so that a different option can be implemented if the client is interested in further developing the concept. Their use of capacity was very high and the process showed evidence of trial and error, where students both kept their minds open to new ideas but at the same time tried to make sense of the new data and the client’s expectations. This case represents the extended abstract level of the creative problem solving process.
<b>Concept 2.</b> <b>“Something for the whole family”</b>	<i>The final concept is a weekly summer program for the whole family. During the weekdays the children may take part in different fun activities in the surroundings of</i>	The structure outcome is a relational, coherent whole that builds on all the activities currently offered by the museum. The innovativeness level is not very high, but the outcome is the best	In the development process the team used multiple methods to gain deep customer insight and they showed quite a deep understanding of their target group. They were able to generate a great deal of ideas using multiple methods and they left their comfort zone to think and work in an area of uncertainty. In the first concepts phase, they were able to pre-

	<p><i>the open-air museum. During the weekends the family can have a nice brunch in a close-by à la carte restaurant and enjoy activities in the open-air museum. The concept and its visual presentation focus on happy family get-togethers and children playing in a safe setting.</i></p>	<p>match for the brief from the client. Thus, the client gains the best value from this concept. This concept was also voted as the best in the final show.</p>	<p>sent the most innovative ideas, which then became more realistic as they developed them for the client. Their work showed an understanding of contextual dependency and relativity. The team showed task motivation and a medium use of capacity. They took responsibility for the project and were motivated to finish the task. All team members worked actively. However, contradictions in task motivation became evident in the learning diaries, and it was clear that some team members had worked harder than the others, especially when solving contradictions. The team worked for a long time at the multistructural level, where they had a lot of ideas, but were not able to form a holistic concept to combine the ideas into a coherent whole. However, they managed to do so in the later stages. The process represents the relational level. It was a coherent process in which many new ideas were evaluated and tested. The team engaged in creative and critical thinking and used explicit methods in several phases of the process; they iterated their ideas using the information they had gained.</p>
<p><b>Concept 3.</b> <b>“A moment for myself”</b></p>	<p><i>The final concept is relaxation sessions for the mothers of young children – a moment for a mother to relax with massage or a natural facial treatment while her children play under supervision. For the children, different activities are offered during weekdays, such as cooking or outdoor games. The focal meaning is relaxation.</i></p>	<p>The outcome is a clear and coherent whole that provides value for the customer group and the client. Unfortunately in the last stage the group lost its focus on children (the target group) and concentrated only on mothers. However, the outcome is clearly based on the students’ own thoughts, which they honed further on the basis of the teachers’ comments.</p>	<p>In the development process the team was highly motivated and committed to the task throughout the course. The development process was rich, deep, and holistic, and the use of capacity was very high. The team had extensive and deep customer insight. The group collected data by interviewing parents in a shopping mall and theatre, did some mystery shopping, and collected data from a primary school. The members of this team were bold and pushed themselves to the limit. They set an example to the other groups as well. They eagerly generated a lot of ideas and worked intensively on evaluating and testing their ideas. Thus, creative thinking and different tools were used in different phases of the process. They were aware of the uncertainties involved in the development process but tackled them with hard work. They kept several options open until the last stage, at</p>



			<p>which point they decided to focus on mothers. Thus they aimed to work consistently and without aiming for quick closure. However, when carrying out the financial calculations, the team lost faith in its own idea, becoming overcautious, and thus diminished the potential financial value for the client. However, the work of this team showed an understanding of relational and contextual aspects and thus represents the process at an extended abstract level.</p>
<p><b>Concept 4.</b> <b>“Book your own puzzle!”</b></p>	<p><i>The final concept is an internet-based booking system that enables companies to plan and book an event for themselves. The booking system offers several ideas for what to include in the day, such as food based on different themes, team-building activities, and a tour of the museum. The application helps companies to compare different options and their prices before contacting the museum itself. The integrating idea is ease of use and convenience.</i></p>	<p>The outcome is unexpected and innovative and clearly stands out from the other cases. However, the group forgot the intended target group. Thus, even though the innovativeness and business perspective were at a high level, the group did not meet the client’s expectations. The client could not use the application. The structure of the outcome represents the extended abstract level, as it is an unexpected, surprising, and coherent whole. However, it was not what the client asked for.</p>	<p>In the process the team took responsibility but was strongly fixated on their first idea. Indeed, the idea remained unchanged throughout the course and no real customer-centered product development took place. Because of this, the team did not let go in the creative process. The students were not open to other options or interested in understanding the customers. Rather, they sought to confirm their own idea. Thus they jumped to a quick closure. By the end of the course the team realized this and added new ideas on top of the main concept. Thus they go into the creative process but at that point they could no longer make extensive use of it. The learning diaries showed that the team included one strong-willed person who ran the team and pushed his idea through. Thus this case exemplifies the unstructural level of the creative outcome.</p>
<p><b>Concept 5.</b> <b>Our open-air museum [name]</b></p>	<p><i>The final concept is a service portfolio that integrates present services, adds some new ones, and glitzes them up with a sense of luxury. The main idea is built on history with a sense of luxury and glamour.</i></p>	<p>The structure of the outcome is a relational, coherent whole. There is medium novelty in combining luxuriousness with history. Also, the team had some new service ideas such as “Mysterious Adventure!” for attracting the target group in a new way.</p>	<p>In the development process the team was motivated to finish the task at hand. However, there were differences among the students in the group. The development process was deep at the beginning, but in later phases it became evident that one half of the group worked harder on tackling the uncertainty than the others. Thus, the overall use of capacity was medium, even though it may have been high in some students and low in some. The team gained versatile customer insight and</p>

		All in all, the concept is a new way to package services, and this is useful for the client. The novel aspect of luxuriousness tied to history needs to be more critically tested with the target group.	were able to push themselves into unknown territory. They worked well during the process and used different creative tools as aids. For example, out of all the groups they were most successful in forming customer profiles and tying them into the development process later on. The team members seemed to round out each other's strengths. As a creative extra, the team composed a jingle that the museum can use in its marketing.
<b>Concept 6. "TimeAdventure!"</b>	<i>TimeAdventure! is a concept that combines a new cafeteria and internet-based game for little visitors. The player travels through time and learns how things were done in the past. Afterwards the children can dress up in costumes like the ones in the game and walk through the museum area. While the children play the game, the parents can relax and enjoy a coffee and special local delicacies. The main focus is to relax, to have a break in the cafeteria.</i>	The idea of combining a larger new cafe and internet play area is modern but unrealistic for the open-air museum. However, the student group successfully implemented business thinking in a museum context. Unfortunately, their ideas are not well tested, but rely mostly on their own evaluation. The level of novelty is low in the case of both the cafe and the game (the museum already has one on its website). However, the group did well in combining these with the idea of getting children to play outside the cafeteria as well. The structure of the outcome is multi-structural. The students combined different independent aspects but were not able to form a coherent whole out of them.	In the development process the team was able to complete all the assignments. However, their task motivation and capacity were low. The teachers had several discussions with the group in order to clarify the level of intended learning. Their customer insight was at a shallow level, as they conducted only two interviews. The team used only some tools for creative thinking and few evaluation methods. Their strength was one creative student who was able to present ideas and advertisements that fit the concept, even though the concept itself was not very well structured. The team had a few ideas at the beginning but the students did not put themselves through the creative and critical thinking processes. The process faced difficulties in the data-gathering phases and after that the group had difficulties in focusing on problem solving. The team worked on one idea for a long time and clearly aimed for a quick closure. Eventually they were able to build a concept, but its premises were not well grounded. Their final presentation surprised everyone as it was mostly a well-done video presentation.

Appendix 3

## Final evaluation questions for the students in autumn 2012

1. Identify and describe three focal learning points during the course. Elaborate on each, describe what you have learned and how your thinking has changed during the course. As you read your own learning diary, how can you see the learning and change?
2. In the beginning of the course you made a individual learning styles test and a social communication test. How did the test results come alive in team work? Has your own thinking changed during the course? Describe the team work challenges in cross-functional teams, try to build discussion above your own experiences. How would you aim to enhance the functioning of cross-functional teams?
3. The course is part of larger entity of creative problem-solving in marketing and its' theoretical background of the course is tied into concept management. This year the project was tied into integrated marketing communication concepts. How do you understand concept management?
4. The course is intended to support the professional growth of the student. Earlier you have already written how you understand professional identity. [Description of Breakwell's (1992) theory of principles on identity construction.] How do you see your growth in professional identity through these four aspects?
5. One important aspect of this course has been client-based problem solving. How was the client-based teaching accomplished? What do you think about client-based projects within university curriculum?
6. The course intended to develop some particular skills. One of them was the application skills. Were you able to apply your earlier knowledge to practice? What worked well and what would you like to develop?
7. Creative process is focal in this course. How do you understand creative process and how did you feel applying it?
8. The course is run in cross-functional teams. How did you succeed with teamwork and how did the cross-functionality occur? What kinds of challenges you faced and how did you solve them. In what sense the team supported you the most?

9. During the course we practiced presentation and communication skills. How did the course support your presentation skills? What helped you, what would you like to have more?

10. The course was held in the new learning environment. What do you think about it, does it suit this kind of teaching? Does the physical environment support your learning? How would you describe atmosphere during the course?

11. Should we continue this kind of teaching in our university? Why or why not? In what amount?

12. What are the things you will take from this course to the future?

Appendix 4

## Client feedback questions 2010–2012

1. Mention three topmost matters about the Concept Factory – cooperation. Motivate.
2. Has the Concept Factory cooperation affected the development of your organization, for example in a form of activities or processes? In other words, did you get ideas either to your everyday activities or to developmental processes? Elaborate.
3. What kinds of resources (time, money, and personnel) did the Concept Factory cooperation require from your side? In what phases were the resources needed most? Would you be willing to invest in a similar cooperation the same amount, less or more resources?
4. If you can wish anything, how would you like to develop the cooperation?
5. What matters you find critical for this kind of cooperation?
6. Did you gain any personal learning experiences through the process? Something you would take with you to another job?









# A HOLISTIC MODEL FOR LEARNING ENHANCEMENT IN HIGHER MARKETING EDUCATION

Minna-Maarit Jaskari  
*University of Vaasa*

This essay combines two conference papers that have been published in the proceedings of the Academy of Marketing Conference 2008<sup>1</sup> and in the proceedings of the Conference on Innovative Pedagogical Models in Higher Education 2008<sup>2</sup>.

## Abstract

Contemporary business life requires constant creativity and innovation. Producing fresh solutions to problems and the ability to invent new products and customer experiences for a changing market are imperative for success. All this have an influence for marketing education. Students need to learn how to apply the theoretical concepts of marketing in real life problem solving situations. In this way they gain both deep understanding and practical marketing skills.

Based on over a hundred master's level student projects, a holistic model for learning enhancement is proposed. The model integrates experiential learning, learning environments and constructive coaching in order to support students' learning process.

Innovative project work in business context requires planning and control but also creativity and flexibility. The student is responsible for his own learning, thus the learning process can be enhanced only partly from outside. It is important to create a set of learning environments; internal, external and virtual, which allows the experiential learning to unfold. Constructive coaching can help the student to acknowledge new aspects and motivates to complete the tasks.

**Key words:** experiential learning, learning environments, constructive coaching

## 1 Introduction

Contemporary business life requires constant creativity and innovation. Creative problem-solving and the ability to invent new products and customer experiences for a changing market are prerequisite for the economy. (Titus 2000, Vogel, Cagan & Boatwright 2005, Anderson 2006) However, to invent new products is not enough. There is a need to creatively integrate different aspects of marketing into a coherent marketing concept that provides value for customers and bring up new profitable business opportunities.

---

<sup>1</sup> Jaskari, Minna-Maarit (2008) A New Holistic Model for Learning Enhancement in the Context of Higher Marketing Education.

<sup>2</sup> Jaskari Minna-Maarit (2008). Put your hands in dirt and dig for the solution” – coaching the learning processes in authentic business cases.

The contemporary innovative business context sets also demands for marketing education (Smart, Kelley & Conant 1999, Evans, Nancarrow, Tapp & Stone 2002, Athaide & Desai 2005). Students need to apply the theoretical concepts of marketing in real life problem solving situations in order to gain both deep understanding and practical skills. This also engages both academics and practitioners into a knowledge sharing processes, that Hughes, Tapp and Hughes (2008) claim for.

The aim of this paper is to propose a holistic model for learning enhancement in higher education. It integrates experiential learning theory, learning environments and constructive coaching in order to support students' learning process.

The model is based on over ten years of experience and a hundred masters' level marketing development projects that have been managed in the department of marketing. Some of the projects have been conducted within a three year EU-project, in which around hundred students worked in international, multidisciplinary teams and developed new product concepts. Other projects include innovative new product concepts and product lines, and evaluation of new business opportunities. There have been projects within integrated marketing such as brand building, channel solutions and marketing communication. These projects differ from each other regarding to the required level of innovativeness, project management, multifunctional teams and real life business importance. Further, the role and intensity of coaching differ. Students attending these projects have been full-time students mainly from marketing but also from design and engineering. The empirical evidence include written project reports together with student learning diaries, collected feedback, interviews with business representatives and observations.

The essay proceeds as follows. I first briefly introduce the theoretical background of the model and propose the model. I then give a practical example on how the model is being used in one of our marketing courses. Then, I discuss the use and main challenges within the model and give suggestions for teachers and finally propose some directions for future research.

## 2 Theoretical background for the model

The theoretical background of the holistic models consists of experiential learning theory, research on learning environments and on constructive coaching. I next discuss each of these and then propose a model integrating these three perspectives.

## 2.1 *Experiential learning*

Experiential learning (EL) sees learning as a process whereby knowledge is created through the transformation of experience. Learning results from the interplay of affect, cognition, perception and behavior. (Kolb 1984:21, 38.) It emphasizes active, student-centered learning and proposes a constructivist theory of learning where social knowledge is created and recreated in the personal knowledge of the learner (Ojanen 2003, Hunt & Laverie 2004, Kolb & Kolb 2005). Learning includes not only the substance of what was supposed to learn, but also meta-skills such as learning skills, problem solving skills and analyzing skills (Hakkarainen, Lonka & Lipponen 1999).

The most effective learning requires four learning modes: concrete experience (CE), active experimentation (AE), reflective observation (RO) and abstract conceptualization (AC). Learning is most effective when student goes through all modes, experiencing, reflecting, thinking and acting. Learning involves a creative tension among the four learning modes that is responsive to contextual demands. (Kolb 1981, Petkus 2000, Kolb & Kolb 2005.) Concrete experience involves sensory and emotional experience in some activity. It provides the basis for the learning process and should be designed to engage, motivate and evoke affective aspects of experience (Kolb 1984, Young 2002, Petkus 2000).

Active experimentation is the doing phase, in which the student engages in a trial-and-error process through field-work, case studies or labs. Active experimentation should move inactive (physically and/or mentally inactive) learners into active and involved learners (Petkus 2000, Young 2002, Wooldridge 2006). Reflective observation involves watching, listening, recording, discussing and elaborating on the experience. It creates meaning from concrete experiences and active experimentation. This phase involves making connections across experiences without necessarily integrating theories and concepts. Abstract conceptualization involves integrating theories and concepts into the overall learning process. This phase involves in-depth thinking. Learners can be asked to relate their experiences and experimental outcomes to textbook theories and concepts. (Kolb 1984, Petkus 2000, Young 2002.)

One of the challenges is to make the learning cycle complete. Concrete experience and active experimentation are bases that are easier to reach by students, but result only to hands-on experiences. However, as the given tasks are complex business projects involving innovative problem-solving, also more abstract thinking is required. This is also supported by Young (2002) who states that experience itself may not be educative. If students do not think seriously about their experiences, they experiences may reinforce stereotypes and incorrect suppositions. In

order to complete the learning cycle and provide meaningful conceptual understanding the minds-on phases, reflective observation and abstract conceptualization, need to be explicitly addressed. Most learning is occurring, when some contradictions are faced and then solved (Kolb & Kolb 2005). Thus for the students it is motivating but also challenging. It may lead to self-assurance and sense of accomplishment and mastery that successful action provides. It may increase motivation and provide associative structure of events in memory that deepens the learning. However, it may also lead to opposite if the student is not motivated and involved, refuses to take the challenge and leaves the problems unsolved.

## 2.2 *Learning environment*

The success of a learning-oriented perspective depends on the creation of an effective learning environment (Gonzalez et al 2004, Young 2002). A shift to a more integrated learning environment has been suggested to improve managers' ability to be creative and effective in solving problems and situations in various arenas. (Eickmann, Kolb & Kolb 2002)

By definition a learning environment is all the factors affecting learning process. Common factors that are present in a learning environment is the open place (or space), content (information), methods and social factors (other people) (Nissinen 2003). *Internal* learning environment is the mind of the learner. It is crucial in learning, especially subjective attitudes, beliefs and emotions may enhance or hinder learning. (Koli 2003, Nissinen 2003) *External* learning environment include physical and social factors that guide the learning. Intelligent and reasonable activity is basically situation dependent, which means that developing professionalism means working in authentic cases or in challenging projects. The modern technology gives possibilities to take learning also into *virtual* learning environment. (Koli 2003, Nissinen 2003, Koli & Silander 2003, Mänty & Nissinen 2005) Social factors such as other students, teams and working groups, coaches, faculty, business people are important in the learning process. This social capital is crucial building block in an effective learning environment. It will lead to collaboration, commitment and positive atmosphere in the learning environment. (Gonzalez et al. 2004) The different learning environments; internal, external and virtual are not separate but closely interconnected. Together they form the context, atmosphere and circumstances, where the learning takes place (Koli 2003).

One of the challenges is to build environments that support student's experiential learning process. For example, students may be resistant to adopting creative practices. There are barriers to express creativity such as fear of failure, fear of doing something different and fear of taking risks (Anderson 2006). Thus the ex-

ternal learning environment should support students' creativity, to facilitate trial-and-error, to build confidence in students and their thinking. Another challenge is related to course management, time and budget. As the student business projects are within curricula, there usually is time constraint and the budget may be tight.

### 2.3 *Constructive coaching*

Experiential learning is seen as constructive learning process. This means that the student's role in creating, constructing, new knowledge based on earlier knowledge and experiences is emphasized (Ojanen 2003). In this context the role of the teacher is more like a coach, to support, to help reach the goal, to find ways to solve problems. Indeed, the traditional teacher role that is characterized primarily by directed, mostly one-way communication and classroom environment has shifted to a facilitator role, where the emphasis is on constructive coaching process (Smart et al. 1999).

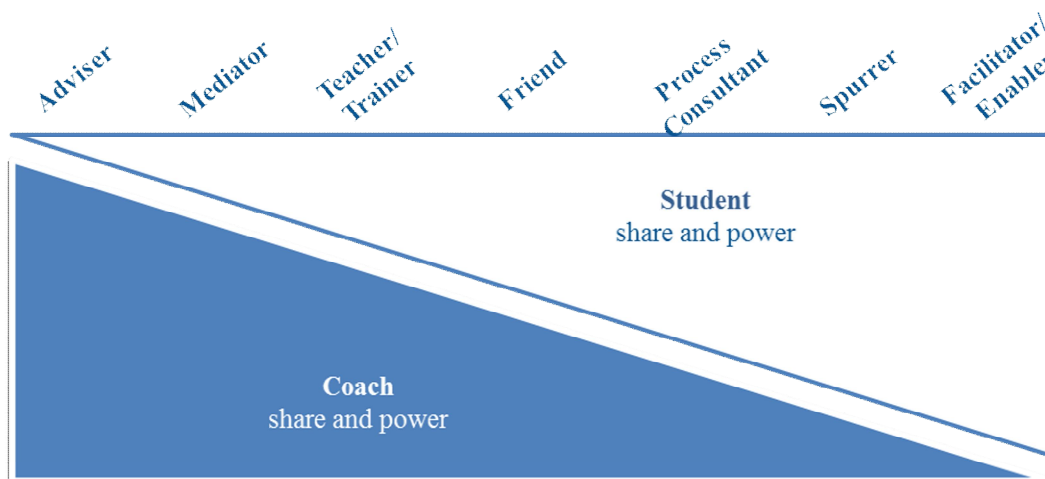
Professionalism is not something you born with, but it is developed over the years and can be supported by coaching (Ericsson, Prietula & Cokely 2007). The process of growing into professionalism is best supported in social network where the individual is assigned to bit by bit growing challenges and supported in reaching the goals (Hakkarainen et al. 1999). The role of the coach may thus be crucial in order to reach all bases of experiential learning and not just leave learning to hands-on level (Young 2002).

Coaching is not just one kind of the process or stable position, but there can be several different coaching roles. In different cases the role of the coach can vary from someone who says how the things should be done to someone who only creates the possibility for others to work. Also the power position or power distance between the coach and the one to be coached varies in different roles. Hirvihuhta identifies seven different coaching roles (2006: 41-51). *An advisor* is a coach with knowledge and skills for some particular theme. He is often in a strong power position, able to say how things must be done. This is good in critical situations, but in the long run he is may take too much of the responsibility. *A mediator* has a strong role in problem solving or crisis situations. *A teacher or a trainer* role involves a coach to make things to be learnt more explicit and help students to look at the problem from different angles. *A friend or colleague* is seen a problematic role for the coach as he should stay neutral and this may be difficult if the coach becomes too good a friend with the student. However, often in the beginning of a coaching relationship it is good if the atmosphere becomes warm and friendly as this is essential for open relationship. (Hirvihuhta 2006: 47) Within teaching this can be enhanced with different team building exercises and

social activities. However, in teaching context this may become a problem as the coach is also responsible for grading and needs to stay objective and equal for all students.

The role of a *process consultant* means that the coach is developing something together with the organization. For example implementing new It-system may need a process consultant to ensure all the important factors are taken into account. *Spurrer, motivator or encourager* as a role emphasizes the positive feedback given to the students. Making the students feel that they are going into the right direction and supporting their ideas. Sometimes students need a little encouragement so that they trust themselves and are not afraid in bringing up their own ideas (Hirvihuhta 2006: 49–50). *An enabler or facilitator* is the role of weakest power position. The coach merely enables students to work. (Hirvihuhta 2006: 50–51) In team work this may mean discussion with team members, helping them to go on with the project, especially if there is some disagreement on how to proceed. Also working facilities and learning environments enables the working process. The minimum requirement is that the coach can be reached at certain times for discussion.

The propositional shares of coaching and students work are illustrated in Figure 1. The different roles of the coach are presented on the top of the figure. The triangles illustrate the share of power. In the left hand side the coach is an advisor, giving instructions on what to do. This puts the students in a position to follow the rules. In the other end, the coach is an enabler, making it possible for students to work. The power over the work is totally on students', coach's role is minimal.



**Figure 1.** Different coaching roles related to propositional shares of working (Hirvihuhta 2006)

The coaching role is not stable and may vary from situation to situation. The coach needs to adapt to different contexts, project phases and student groups and find out what kind of the role is needed in each case (Hirvihuhta 2006: 51). Indeed, the learning environment for coaching is critical. Demanding, competitive atmosphere is not a good platform. On the other hand, too comfortable situation may lead to not taking thinking into limits. (Hirvihuhta 2006: 43–46) The coach can take responsibility in making the environment better for learning and by asking such questions that open students' eyes and motivate them to look for new solutions.

This makes coaching a very sensitive process. The coach needs to sense different situations, cases, students and contexts; go behind what is said or written in order to find out what is really needed in each project. The circumstances still get another angle when we take into account that not all the students are motivated and eager to do their work, but some may even try to hide what they have or have not done. Indeed, different students may need different types of coaching, some need straightforward confrontation and some very sensitive motivation.

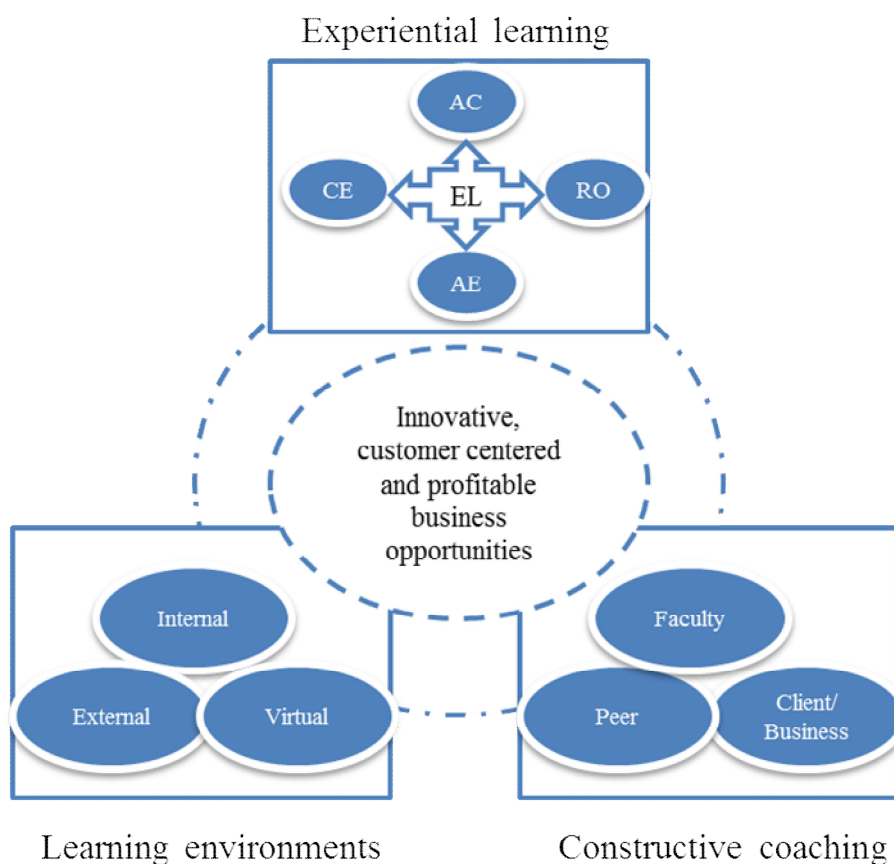
The starting point for coaching is the students' learning process, not the teaching process (Kalli 2003, Koli & Silander 2003). In the context of experiential learning the role of the coach is to support the students' holistic learning experience. In each case the coach should keep in mind the four bases of experiential learning: feeling, reflecting, doing and thinking thus guiding the students to touch all those bases.

Coaching should not be restricted to faculty as other students, peer groups, consultants and other business professionals form a valuable resource for coaching, especially in business project context. However, their relative importance is different in different projects and in different phases of the projects. The coaching should aim at realistic project outcomes and deepening the understanding of marketing concepts and their interrelationships. Also practical skills need to be developed. Especially from academic point of view coaching can be explicitly used in making contradictions explicit and in giving tools to creatively solve the problems. For a professional coach, it is important to have the theoretical pedagogic background clear as every coaching situation aims at a learning experience where the students touch all the bases according to experiential learning cycle.

There is also a challenge in how much the project work needs to be structured and how much freedom should be left for the students to think themselves and come up with their own ideas. Time and budget constraints may be a challenge in balancing coaching between different projects. The process is can be simpler to han-

dle if there is only faculty coaches, however the business projects may need business coaching to ensure the business-like working.

Based on the theoretical discussion above, the holistic model combines experiential learning, learning environments and coaching process in order to enhance deep learning within marketing education. The model is presented in Figure 2.



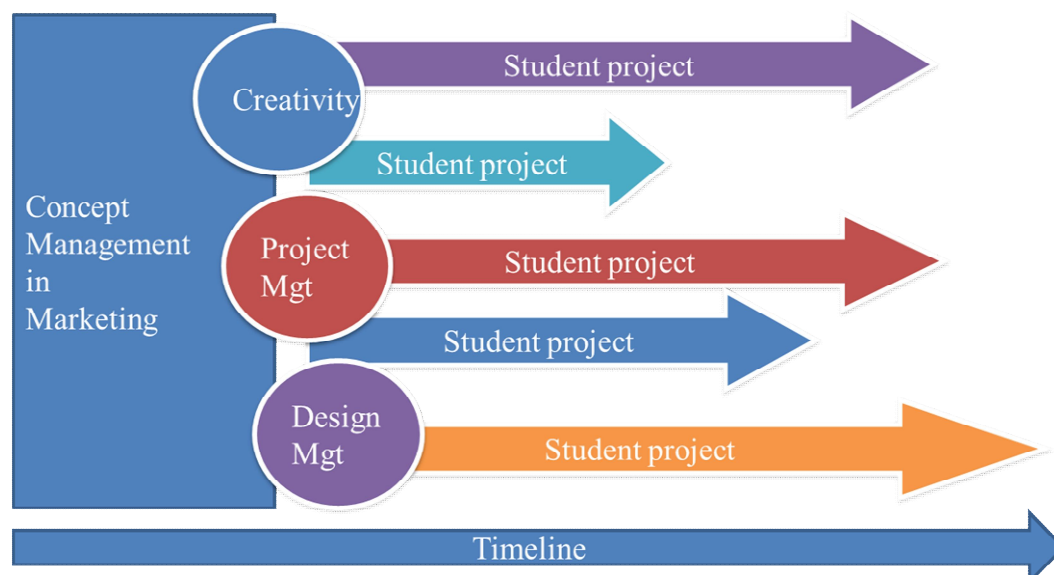
**Figure 2.** A holistic model for learning enhancement in business projects

### 3 Concept Factory – a practical example

The specific case for applying the model a course is Concept Factory. It is a Master's level course on creative problem solving in marketing in the University of Vaasa, Finland. The course emphasizes client-based teamwork, independent and self-directed project work, and creativity and design thinking. A close co-partner is Western Finland Design Centre, Muova.



The Figure 3 presents the visual outline of the course structure (year 2007). The students first attended a theoretical course on concept management. Lectures and reading seminars familiarized students to theoretical background knowledge and contemporary challenges in customer driven concept management. These were accompanied with half-a-day workshops on creativity, project management and design management. These workshops gave practical tools, such as project planning guide, to run the development projects. Client-based projects were negotiated by training manager and students were assigned to them on the basis of their interest. The students were also able to bring in their own business ideas as project work. The projects run for 12–16 weeks depending on the project plan. The students were able to gain 4–10 study points depending on the scale of their project.

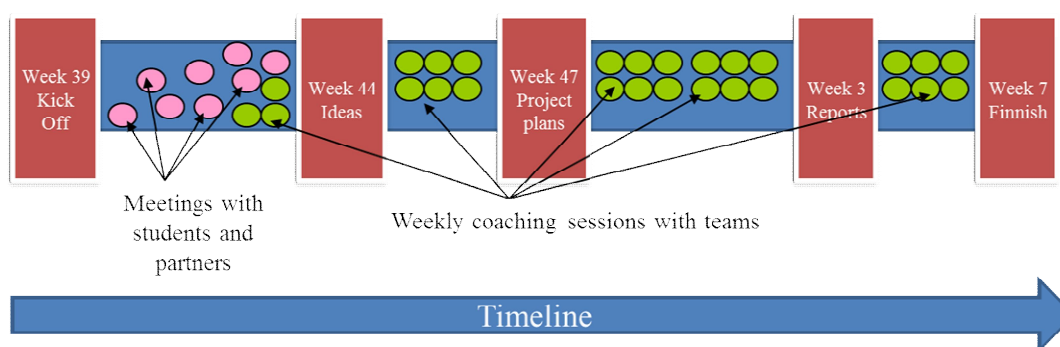


**Figure 3.** The visual outline of the course structure in 2007

The coaching model was developed during summer 2007. A constructive approach gave the guidelines. Multiple methods for data gathering were used: the feedback and experiences from earlier project courses was gathered to pinpoint the key areas for coaching; teachers, partners and students were interviewed; also other national and international multidisciplinary courses were benchmarked. The process was evaluated by teachers, students and partners during the actual course which run until mid-February 2008.

Coaching was done in several phases along the course by several people across the disciplines. However, the coaching process was developed to give structure and manageability for the process. The structure was given by specified meeting

dates, some of which were compulsory for all the students and some of which were available if the team wanted to meet. There were five coaching sessions, where all the students were present. Twice a week there were session times if the students wanted to discuss with the training manager. The students were asked to visit at least every fortnight so that the training manager could control that the work was progressing. Coaching was done mainly by training manager, but the idea was that there can be several parties that are available for coaching if the students felt the need for that. The visual outline of the coaching process is presented in Figure 4.



**Figure 4.** Visual outline of the coaching process (2007–2008)

The course started with a kick-off where all the students were gathered together and the guidelines for the course were introduced. The training manager emphasized the new working method and the requirement for student involvement and active participation. Only after this the students made the decision whether they want to participate in this new course or if they preferred an alternative, individually studied course.

After this the students were assigned to different projects that were already negotiated by the training manager. Within each project a meeting was set together with the assigned student team, the company and the training manager. At that meeting the background for the project was elaborated, a professional brief was written and signed. After this the students were ready to start thinking about project plan. From this onwards the students kept contact with the companies by themselves, however some feedback was asked by the coach during the process.

The second coaching session included discussions about how to start solving the development projects. Ideas were generated in larger groups and these ideas were challenged and discussed. The theoretical concepts for each problem area were discussed so that the students would find it easier to relate the problem to theoretical discussion.

The third coaching session concentrated on evaluating project plans. Some projects were already in their empirical phase as different projects had different time tables. Basically the coaching emphasized same things based on experiential learning cycle: feelings, reflections on those feelings, what is to be done and how that is conceptualized. Especially in this session the emphasis was to share experiences to other students and get feedback from others. This was important as it was seen that not only one solution fits the problem but there were many different alternatives. Discussion on these alternative decisions aimed at deepening the understanding of the context and relativeness of business problems. The coach's role here was also to motivate the students to be creative and find creative solutions, to make the extra effort.

The fourth coaching session was a get together after Christmas holidays. It emphasized theoretical aspects as well as business report writing. At this time some of the projects had already been handed in. The last session was the "Final Event", where all the projects were presented as posters and some students presented their reports. The session was open not only for students but all the partners in business, university and other organizations.

## 5 Discussion

During the first term there were twelve different projects. Altogether students were satisfied with the course and its structure. The real life project work was considered challenging but also rewarding. The projects were finished within given timeframe and all the students passed the course. Some project reports were creative and had a professional outlook. During the course feedback was gathered from students, clients and co-operative partner in order to pinpoint the challenges as well as the best practices.

From the experiential learning point of view it seemed that some bases were easier to reach than the others. Feelings and reflections were easily reached, doing phase needed mostly motivation, but the abstract conceptualization seemed the most challenging part. This finding is along the lines with Young (2002). The phase of abstract conceptualization needed the most coaching. The experiential learning theory suggests that the most learning is occurring, when some contradictions are faced and then solved. Coaching was needed in making contradictions explicit and in giving tools to solve the problems. However, it is emphasized that the coach should not try to solve the problems for the students but give tools and guidelines that lead the students to think about different alternatives. In this way the students resolve the conflicts themselves and gain the sense of self-

accomplishment. As for the coach, it is useful to have the theoretical framework clear in mind so that in coaching situations the coach can help the students to follow the learning cycle and touch all the bases.

Learning depends on many things and one critical is internal learning environment, the mind of the learner. It is difficult to force someone to learn. This was also the case in one of the projects. In that case the students were happy with doing by feeling and were not eager to push their thinking forward. They seemed to avoid every contradiction as if there were none. In such situation students seemed to put their hands on, but not their minds on (see also Young 2002). This was challenging for coaching process as the discussion often was driven to peripheral topics such as “why do we need to read literature anyway”, “I can’t come as I have my work”. Indeed, experiential learning is challenging for students and they need to make an effort to gain deep understanding. Motivation for learning must come from students, coaching can then motivate and help to make learning deeper and more challenging. So even if the coaching sessions are compulsory, the learning process cannot be forced.

Another challenge for coaching is that the project aim at students’ self-direction, the idea is that they run the projects as project coordinators and take responsibility for the whole project. Not all the students need the coaching much as they can ask the questions themselves, they find the contradictions, solve them and go forward. Sometimes it is difficult for the coach to see what the situation is in different projects. Again, coaching process needs to be case sensitive and can be structured only to some extent. Structuring gives guidelines and a sense of professional work. This was done by ready set meeting dates that were team specific but included also group coaching were students worked on each other’s projects together. Another structuring method was to make specific deadlines for briefs, reports and posters. These worked well. Coaching for making project plans and meeting deadlines was clearly appreciated also by students.

## 6 Conclusions

Experiential learning (Kolb 1984) has been seen as powerful pedagogy for business. The approach has been used for example in principles of marketing (Wooldridge 2006), services marketing (Gremler, Hoffman, Keaveney & Wright 2000, Petkus 2000), international trade shows (Helms, Mayo & Baxter 2003), marketing ethics (Hunt & Laverie 2004) as well as other courses within marketing (Li, Greenberg & Nicholls 2007). However it has often emphasized experience and experimentation and less reflective observation and conceptualization (Young

2002). Thus in the proposed model, I aim at more explicit discussion on the role of coaching in order to enhance the deep learning. In earlier literature coaching has been discussed mainly implicitly, although some practical advice for teachers is available (Davis 1983). The coaching in experiential learning processes is challenging but also inspiring and a lot of fun. When there are motivated student groups that are eager to put their hands into dirt, that are ready to take the challenge, they also challenge the coach. In this way the coaching becomes an experiential learning process also for the coach. Further, the learning environments have been argued to have an influence on learning outcomes (Gonzalez, Ingram, La-Forge & Leigh 2004); however there is a need for more discussion on how the learning environments enhance the deep learning. Thus in the proposed model the different learning environments are integrated into learning process in order to support better learning outcomes.

The deeper understanding of creative and efficient learning environments also set agenda for future research. For further study, it would be also interesting to discuss the different learning styles and how these roles are present in the model. Also, although this essay focuses on full-time students most of whom have come straight from high school to university, it would be useful to elaborate the model in relation to part-time students who may already have an extensive business experience and an ability to undertake projects professionally.

This essay forms a large scale understanding of different arenas affecting innovative client based project course. Innovative project work in business context requires planning and control but also creativity and flexibility. Even though the learner is responsible for his own learning, the learning process can be enhanced partly from outside. It is important to create a set of learning environments, internal, external and virtual, that allow the experiential learning to unfold. Constructive coaching can help the student to acknowledge new aspects and motivates to complete the tasks. All in all the aim is to coach self-confident marketing graduates that trust their skills and are prepared to meet the challenges of future business life.

## References

- Anderson, L. (2006). Building Confidence in Creativity: MBA students. *Marketing Education Review* 16:1, 91–96.
- Athaide, G. A. & Desai, H. B. (2005). Design and Implementation of an Interdisciplinary Marketing/Management Course on Technology and Innovation Management. *Journal of Marketing Education* 27: 3, 239–249.
- Davis, B. G. (1993). *Tools for Teaching*. San Francisco: Jossey-Bass.
- Eickmann, P., Kolb, A. & Kolb, D. A. (2004). Designing Learning. In Boland, R. J. & Collopy, F. (Eds.). *Managing as Designing*. Stanford: Stanford University Press. 241–247.
- Ericsson, K. A., Prietula, M. J. & Cokely, E. T. (2007). The Making of an Expert. *Harvard Business Review* July-August, 114–121.
- Evans, M., Nancarrow, C., Tapp, A. & Stone, M. (2002). Future Marketers: Future Curriculum: Future Shock? *Journal of Marketing Management* 18: 5/6, 579–596.
- Gonzalez, G. R., Ingram, T. N., LaForge, R. W. & Leigh T. W. (2004). Social Capital: Building and Effective Learning Environment in Marketing Classes. *Marketing Education Review* 14: 2, 1–8.
- Gremler, D. D., Hoffman, K. D., Keaveney, S. M. & Wright, L. K. (2000). Experiential Learning Exercises in Services Marketing Courses. *Journal of Marketing Education* 22: 1, 35–44.
- Hakkarainen, K., Lonka, K. & Lipponen, L. (1999). *Tutkiva Oppiminen. Älykkään toiminnan rajat ja niiden ylittäminen*. Porvoo: Wsoy.
- Helms, M. M., Mayo, D. T. & Baxter, J. T. (2003). Experiential Learning: The Benefits of Trade Shows for Marketing Students and Faculty. *Marketing Education Review* 23: 3, 17–25.
- Hirvihuhta, H. (2006). *Coaching – Valmenna ja Sparraa Menestykseen*. Keuruu: Kustannusosakeyhtiö Tammi.
- Hughes, T., Tapp, A. & Hughes, R. (2008). Achieving Effective Academic/Practitioner Knowledge Exchange in Marketing. *Journal of Marketing Management* 24: ½, 221–240.
- Hunt, S. D. & Laverie, D. A. (2004). Experiential Learning and the Hunt-Vittel Theory of Ethics: Teaching Marketing Ethics by Integrating Theory and Practice. *Marketing Education Review* 14: 3, 1–14.

- Kalli, P. (2003). Ratkaisukeskeinen pedagogiikka ammatillisen opettajan työvälineenä. In Kotila, H. (ed.) *Ammattikorkeakoulupedagogiikka*. Helsinki: Edita Publishing, 59–75.
- Kolb, D. A. (1981). Experiential Learning Theory and The Learning Style Inventory: A Reply to Freedman and Stumpf. *Academy of Management Review* 6: 2, 289–296.
- Kolb, D. (1984). *Experiential Learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- Kolb, A. Y. & Kolb, D. A. (2005). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education* 4: 2, 193–212.
- Koli, H. (2003). Oppimisprosessin ohjaus uusissa oppimisympäristöissä. In Kotila, Hannu (ed.) *Ammattikorkeakoulupedagogiikka*. Helsinki; Edita Publishing, 153–169.
- Koli, H. & Silander, P. (2003). *Verkko-opetuksen työkalupakki – oppimisaihioista oppimisprosessiin*. Saarijärvi: Saarijärven offset.
- Li, T., Greenberg, B. A. & Nicholls, J. A. F. (2007). Teaching Experiential Learning: Adoption of an Innovative Course in an MBA Marketing Curriculum. *Journal of Marketing Education* 29: 1, 25–33.
- Mänty, I. & Nissinen, P. (2005). *Ideasta toteutukseen – verkko-opetuksen suunnittelu ja hallinta*. Laurea-ammattikorkeakoulun julkaisusarja C-9, Vantaa.
- Nissinen, P. (2003). Verkkovälitteinen opetus ammattikorkeakoulussa. In Kotila, Hannu (ed.) *Ammattikorkeakoulupedagogiikka*. Helsinki: Edita Publishing, 122–238.
- Ojanen, S. (2003). Ohjauksesta oivallukseen – ohjausteorian kehittelyä. In Silkeä, R. (ed.), *Suomen harjoittelukoulujen vuosikirja* No 1. Available at: <http://sokl.joensuu.fi/verkkojulkaisut/ohjaus/ojanen.htm> [Accessed 30 January 2008].
- Petkus, E. Jr. (2000). A Theoretical and Practical Framework for Service-Learning in Marketing: Kolb's Experiential Learning Cycle. *Journal of Marketing Education* 22: 1, 64–70.
- Smart, D. T., Kelley, C. A. & Conant, J. S. (1999). Marketing Education in the Year 2000: Changes Observed and Challenges Anticipated. *Journal of Marketing Education* 21: 3, 206–216.
- Titus, P. A. (2000). Marketing and the Creative Problem-Solving Process. *Journal of Marketing Education* 22: 3, 225–235.

Vogel, C. M., Cagan, J. & Boatwright, P. (2005). *The Design of Things to Come. How Ordinary People Create Extraordinary Products*. Upper Saddle River, New Jersey: Wharton School Publishing.

Wooldridge, B. R. (2006). The Power of Perception an Active/Experiential Learning Exercise for Principles of Marketing. *Marketing Education Review* 16:2, 5–7.

Young, M. R. (2002). Experiential Learning = Hands-on + Minds-on. *Marketing Education Review* 12: 1, 43–51.



## Using Pictorial Collages in User-centred Construction of a Creative and Effective Learning Environment

*Minna-Maarit Jaskari, University of Vaasa, Finland*

### ABSTRACT

The paper adopts a user-centred approach to the construction of a creative and effective learning environment for business students. The literature review introduces the earlier theoretical discussion on internal, external and virtual learning environments. A projective collage technique is applied to reveal the students' ideas and thoughts concerning their studies. These meanings include tensions between (a) business and pleasure, (b) I and others, (c) concentration and inspiration as well as (d) safe and extraordinary. A metaphor of a safety net is used to illustrate the creation of the learning environment. The paper provides suggestions for how teachers can create and maintain a creative and effective learning environment.

**Key words:** learning environment, marketing students, projective techniques, content analysis

### INTRODUCTION

Contemporary pedagogical approaches emphasise learner orientation rather than teaching orientation (Zepke, Leach and Prebble 2006). Instead of shallow learning strategies, pedagogy needs to focus on constructive, deep understanding. Frameworks such as constructive alignment provide tools for teachers to enhance deep learning among students (Biggs and Tang 2007, 50-54). The size and the form of the place of learning govern much of the teaching that happens. Although its influence will vary from teacher to teacher, the physical environment plays a significant role in how teachers approach their teaching or how they view what is possible within a particular place (Jamieson et al. 2000).

The success of a learning-oriented perspective depends on the creation of an effective learning environment (Gonzalez et al. 2004). Researchers have suggested that an integrated learning environment improves students' ability to be creative and effective in solving problems in different contexts (Eickmann, Kolb and Kolb 2004); nevertheless, learning programmes still focus more on activities, and less on space and place (Beard and Wilson 2006, 79).

Classrooms have remained very similar for over 100 years, and some scholars have argued that they have been designed more to facilitate the

work of teachers than to support learning (Beard and Wilson 2006, 80-81). The slightly sarcastic argument has been put forth that we know more about how to prevent heat loss in designing learning environments than learning loss (Higgins et al. 2005). In spite of these provocative arguments, it seems clear that we have a limited understanding of how the physical space enables teaching and learning (Neill and Etheridge 2008).

According to Higgins et al. (2005), the research that has been done is largely predicated on a traditional view of "chalk and talk" learning in standardised "one-for-all" institutions. However, our understanding of teaching and learning is evolving in a more constructive direction, and thus learning environments also need to be redesigned to reflect the changes in pedagogical development (Bransford 2000, 131). Even though there is a growing body of literature on learning environments in a broad sense (Herrington and Herrington 2005; Paladino 2008), more research is needed to understand the design of more integrated learning environments.

Furthermore, earlier studies on learning environment research neglect to focus on the end-users, even though successful innovation processes are argued to require a deep understanding of customers or end-users (Olson, Waltersdorff and Forr 2008). Also, Higgins et al. (2005) point out that in order to design a learning environment successfully, it is vital to involve the end-users in the design process. Thus, in this study, the end-users' thoughts and feelings are taken as a starting point for creating the learning environment.

The aim of this study is to construct suggestions for developing a creative and effective learning environment. First, a brief literature review introduces the earlier research on internal, external and virtual learning environments. Second, I apply a projective collage technique to reveal the students' ideas and thoughts concerning their studies, and discuss the results alongside relevant earlier literature on learning environments. Third, I apply this knowledge in the creation of a model of a creative and effective learning environment. Finally, the paper provides suggestions for how teachers can create and maintain a learning environment. This study contributes to the

development of learning environments that support students' learning processes.

### IDENTIFYING DIFFERENT LEARNING ENVIRONMENTS

Learning goes on all the time and in all kinds of places (Chism 2006). Typical learning environments include lecture halls, laboratories and libraries. That said, a learning environment in a broad sense is not just a particular place, but also encompasses the factors – internal, external and virtual – that affect the learning process (Koli 2003).

*The internal learning environment* is the mind of the learner, including earlier experiences, beliefs, fears, emotions, skills, knowledge, motivation, learning styles, approaches to learning and other factors that affect how the student learns (Koli 2003). Approaches to learning reflect the individual differences in the strategies students use to achieve a learning task. The deep approach to learning involves trying to find and understand the meaning of the ideas; it is a holistic process, where the student is looking at the broad picture and actively aims to relate the ideas to his or her previous knowledge and looks for patterns and underlying principles. The surface approach involves coping with course requirements, reproducing content and routinely memorising facts and procedures in order to complete the given tasks with minimum effort. A strategic approach refers to organised, self-regulated studying that involves managing time and effort effectively and being alert to assessment requirements and criteria (Entwistle and Peterson, 2004). The internal learning environment is crucial in learning; especially, subjective attitudes, beliefs and emotions may either enhance or hinder learning (Andersson 2006). Although teaching and coaching can help change attitudes, it is up to the individual herself to accomplish the mental change.

*The external learning environment* includes the physical and social environment that can be changed and altered by other people (Koli 2003). The starting point for creating a learning environment is to consider what is taught, how it is taught and how it is assessed (Biggs 1996). However, the physical environment – such as lecture halls and libraries – also affects the learning process (Koli 2003). Basic physical variables such as air quality, temperature and noise have a strong, consistent influence on learning. However, once minimal standards are attained, the effect seems to be less significant. Other variables such as acoustics, lighting and colour may have an impact on

learning, but the relationship remains more complex (Higgins et al. 2005). The external environment can be designed to enhance certain moods or mind states (Beard and Wilson 2006: 82), thereby also affecting the internal learning environment. Environments that elicit positive emotional responses may lead not only to enhanced learning, but also to a powerful, emotional attachment to the place (Graez 2006). On the other hand, environments that cause discomfort may hinder learning. For example, unreliable Internet connections, slow computers, and indifferent or aggressive teachers may be factors that dampen the motivation of even the most eager students.

Social factors such as faculty, coaches, other students and different working groups all affect the learning process. Indeed, the teacher's input may be crucial in creating an interactive and responsive environment that inspires learning (Paladino 2008). Gonzalez et al. (2004) point out that social capital is a crucial building block in an effective learning environment. It consists of four factors, namely connections among students, building trust with students, establishing shared values with students and providing equitable opportunities for students. The more of these factors are present, the higher the social capital of the learning environment. Higher social capital will lead to collaboration, commitment and a positive learning environment.

Physical learning environments are places, but new technologies and online environments are referred to as spaces (Jamieson et al. 2000) or *virtual learning environments*. The most traditional form of such a learning space is a computer that provides the student with different kinds of materials such as videos, lecture notes and exercises on some topic. It can be structured as a course or it may just be a space that contains information (Koli and Silander 2003). Internet-based virtual worlds such as Second Life are three-dimensional communities that mimic the real world without physical limitations, aiming at creating real world experiences in virtual world environments (Tuten 2009) while also highlighting social and interactive aspects, thereby seeking to build social capital in virtual life. A virtual learning environment can also take the form of a game, that is, "edutainment", education and entertainment put together (Hietanen and Rubin 2004). More recently, the rise of social media such as YouTube, Facebook, Twitter and blogs is opening up new dimensions of virtual learning environments (Granitz and Pitt 2011). However, even if technological tools may enhance the

learning experience, many students wish for human presence and guidance (McGabe and Meuter 2011, Buzzard et al. 2011).

The internal, external and virtual are closely connected to each other. Together they form the context, atmosphere and circumstances in which the learning takes place (Koli 2003). One of the challenges is to construct environments that support a student's experiential learning process (Kolb 1984). For example, students may be resistant to adopting creative practices due to barriers to expressing creativity such as fear of failure, fear of doing something different and fear of taking risks (Anderson 2006), all of which arise from the internal learning environment. Thus the external learning environment should support students' creativity, facilitate trial-and-error, build up the confidence of students and help their thinking. Also, curricula impose time and budget constraints on teaching and learning. For example, student project work needs to be completed in a certain timeframe. It can be asked whether an effective learning environment that enhances deep learning can also account for these time and possible budget constraints.

Future learning environments should enable greater flexibility and mobility of people, knowledge, furniture and other artefacts (Beard and Wilson 2006, 80). They should allow for multiple modes of instruction and learning. The flexibility of the learning environment has been found to contribute positively to student engagement, collaboration, flexibility and learning (Neill and Etheridge 2008). Activating the learning environment fosters quality interactions among students and between students and teachers (Meeuwisse et al. 2010), helping students to integrate (Prince 2004), to feel they belong (Umbach and Wawrzynski 2005) and to achieve good study results (Zepke et al. 2006).

The extent to which and the ways in which the users are engaged in the learning environment design process determine the success or failure of the resulting design. There are no off-the-shelf solutions; – the users' ability to articulate a distinctive vision for their learning environment is what matters. Indeed, no single design solution will work forever. User involvement must be continually refreshed and iterated to support ongoing change. This also provides the users with a sense of ownership of the learning environment (Higgins et al. 2005).

## METHODOLOGY

The study was conducted in the Business School of the University of Vaasa, Finland. The researcher chose to gather data from a master's level (4<sup>th</sup> year) marketing course with 20 students. This course is pedagogically based on experiential learning (Kolb 1984). The course requires full-time marketing students to work in teams of 3-4 students and solve authentic real-life development projects for companies. The learning objectives emphasise the skills of project management, creative problem solving and teamwork skills. In order to pass the course, the students have to be bold and do something completely new and work in an area where there are no right answers; in this effort, they need to be creative and have professional know-how in different aspects of marketing.

In order to collect data for this study, the researcher used a pictorial collage technique. It is a method in which participants are asked to represent a phenomenon visually by composing and gluing a collage of images, drawings and texts on a piece of cardboard. This collage is then used as a stimulus for discussion in the interviews (Moisander and Valtonen 2006, 96). The collage technique requires people to use metaphors, that is, they must experience and explain one thing in terms of another. Metaphors are powerful because they reveal thoughts, feelings and experiences (Zaltman 1997).

The students were asked to collect pictures, words, photos or other materials that elaborate their thoughts and feelings on the topic of "my studies". In order to produce metaphors related to the theme, the students were instructed not to include pictures of their studies. This broad theme was chosen in order to understand different kinds of learning environments and to ensure that the students would not focus on only a limited number of topics. The students were asked to glue the pictures onto an A3 sheet of paper.

Altogether, the students completed 20 collages. The pictures used in the collages were diverse in nature. The students also cut text out of magazines and glued these onto the collages. After completing the collages, the students were interviewed in six groups. The first group was interviewed by the researcher; the later groups were interviewed by three students. The interviews followed the Z-met method (Zaltman 1997; Zaltman and Coulter 1995), where (a) the students were asked to openly describe their collages and explain why they chose certain pictures and words in order to elaborate the meanings attached to different pictures. (b) They were asked to group

the pictures in different themes and elaborate on those themes. (c) They were asked to point out if some pictures seemed to be more important to them than others and then to explain whether some pictures hid deeper meanings, secrets that the pictures do not show and things that happen outside of their borders. (d) The students were asked to tell what kinds of colours, smells and feelings they associated with the picture. (e) In the end the students were asked how they understand the concept of the learning environment and what kinds of learning environments they use, when and why.

The data consists of the collages and the interview reports. The data was analysed using qualitative content analysis (Miles and Huberman 1984). First, the interview transcriptions were read through several times and, second, the data was coded inductively based on the meanings that emerged from the data. Third, the coded data was categorised into different themes and finally the categories were grouped together on the basis of similarity and difference. Eight abstract themes emerged and these were further combined to form four categories, representing the tension between the themes (Spiggle 1994). The analysis was done at aggregate level and thus differences between different collages are not evaluated.

#### MEANINGS ATTACHED TO LEARNING ENVIRONMENTS

The data enabled the researcher to gain rich information about students' thoughts concerning their studies and different learning environments. The four aggregate themes include opposing themes and are termed (a) business and pleasure, (b) I and others, (c) concentration and inspiration and (d) safe and extraordinary. These are elaborated below. The extracts from the interviews are translated from Finnish and are coded with sex and identity number. Business and pleasure

*Business* refers to everyday learning activities, such as attending lectures, completing exercises, doing teamwork and passing exams. The students described these activities as being hard work, as they need to schedule lectures and assignments in order to do them properly and reach their goals. As for places, the students considered that business involves traditional learning environments such as lecture halls and exercise rooms. Indeed, business has a goal orientation that reveals an emphasis on a strategic approach to learning (Entwistle and Peterson 2004).

Students stated that their future goals were to get a diploma from the school or a good job. Some students emphasised the learning process itself, taking a deep approach to learning (Entwistle and Peterson 2004). Some students were afraid of not reaching the level of learning that was expected in their future jobs. Many students stated that their hard work was stressful, placing them under great time pressure. They even described the feelings they attached to these pictures as being depressing. However, the students also mentioned that they felt success and joy when they completed hard work.

"This picture in the middle symbolises the working life I'm heading towards and what my future job could be like. A stylish environment, some kind of marketing job that involves trends, co-workers about the same age, a youthful workplace, one that is in the spirit of the times." (2, female)

As a counterbalance to hard work, the students mentioned free time, relaxation and breaks. Opposed to business, pleasure was often situated outside of the university area. The students stated that parties, get-togethers with other students, exchange programmes and travelling helped them to cope with hard work and business.

This part of my collage symbolises relaxation and chilling out. This is what you need to counterbalance your studies. (5, female).

An important environment within the university campus was the campus café. It is a place where students can have a break, drink some coffee, chat with friends and also do some teamwork. These situations were described as being more creative and inspirational, as opposed to stressful lectures, teamwork or concentrated studying alone.

#### I and others

The learning environments were shaped by individual and social aspects. The individual learning environment sets the goals and plans for the studies. The students described their goals in a self-centred manner as *my* goals, *my* studies, *my* life or *my* future. Also, there was an emphasis on describing what an individual does – how he studies, what he feels and how he pursues his goals. In fact, even if some exercise such as team or project work is assessed at a group level, most assessments focus on the individual. Also, the final grades are individual. Again, this refers to organised studying (Entwistle and Peterson 2004).

The students mentioned their social environment several times, revealing its importance.

Friends, teamwork, social networks, parties and communality emphasised the social aspects of learning. Also, Meeuwisse et al. (2010) found that students' informal relationships with fellow students led to a sense of belonging and thereby helped their academic progress. Teamwork and working groups were mostly mentioned in positive terms, serving to challenge thinking, enhance learning and deepen understanding. Sometimes the students described teamwork as being depressing and stressful, for example if the group did not work well or if there were freeloaders present in the group.

"Here is a picture where guys are carrying wood. It symbolises communality, friendship, socialisation and teamwork. When we study, everyone does their own thing, but at the same time we all are here studying together in the same place and helping each other." (3, female)

Larger social networks develop over time not only in university surroundings, but also at parties and other social gatherings. Students noted that the networks and social community they build during their studies are important in helping them grow as a person and making life-long friendships – and that these networks may even help them later in life.

"And your networks are important. During your studies, you create networks that are helpful to you later, both when looking for a job or socially. Also, study time and interaction among students makes you grow as a person." (12, male)

The social aspect has been noted in earlier studies as well. Paladino (2008) discusses how creating an interactive and responsive teaching environment inspires learning. She proposes engaging in problem-based teaching and collaborative learning to foster discussions between students and between faculty members and students. This leads to growth in social capital (Gonzalez et al. 2004) and enhances learning. Also, Chism (2006) notes that the social setting greatly influences learning and this should be considered in, for example, seating arrangements.

#### CONCENTRATION AND INSPIRATION

Learning environments that support focused studying help the students to concentrate on their given tasks. Students needed to have focused concentration and the time to read and think alone in order to go deep into the topics and to memorise and understand things. The library and home as physical environments were mentioned as learning environments that support peaceful, concentrative studying. The campus library

features a scenic window with a view of the sea – the students mentioned this window several times as something that helped them concentrate when reading alone in the library.

"I made this collage at home. I wanted to do it in peace. In the library I would not have been as creative or thought so freely about things. You go to the library to study hard and memorise – it's a more serious place." (1, female)

Whereas concentrative studying was seen as happening at the university, inspiration and creativity were often considered to happen outside the university campus. An exception to this was the campus café, which provided an important meeting place where students could engage in inspiring teamwork. Students described how they gained inspiration from creative stimuli – seeing, trying and learning new things. However, faculty and teachers may provide inspiration by, for example, introducing active and collaborative learning techniques and engaging students in real-life experiences (Umbach and Wawrzynski 2005).

#### SAFE AND EXTRAORDINARY

Successful learning needs an environment where the students feel basic security. As a theme, *safe* refers to a situation in which students know what to do and what is expected from them. The years students spend at university comprise an important phase in their lives. It is also a period of time when they can still make mistakes and learn from them. They need a feeling of safety for trying new things, discussing ideas with other students and with coaches. They do not have to know all the right answers yet, and they need to engage in trial and error in order to understand things deeply. Students need to feel secure in expressing their own ideas without the fear of being laughed at. Indeed, a good learning environment provides the "*licence to make mistakes*" (6, female). This secure foundation allows students to set their sights on tackling more challenging, controversial and ambiguous problems. The theme of security is in line with the findings of Andersson (2006), who found that MBA students were afraid of making mistakes and losing face in front of their peers. A secure environment encourages trial and error processes that foster deep learning.

"To be able to study, one must have a feeling of a basic security, concentration, creativity and self-discipline." (2, female)

When one is in a safe environment, it is easier to try something new, step into new and unknown

territory, challenge oneself and try new things. However, it seemed that the local university milieu was more effective at serving as a safe platform than providing extraordinary new events. Students sought extraordinary experiences from trainee programmes and travelling.

“This picture of an aeroplane illustrates that I was on a traineeship and I am going again. In its own way, studying is travelling. You learn a lot from travelling. During traineeships one can learn so much more than if you were just studying in Finland.” (2, female)

Chism (2006) points out that environments that provide experiences, stimulate the senses, encourage the exchange of information and offer opportunities for rehearsal, feedback, application and transfer are most likely to support learning. Chow and Healey (2008) conducted a study where they followed first-year university students who were making the transition from home to university. This transition involves changes for students and is frequently greeted with mixed feelings. While moving to university, some students distance themselves from their existing social support networks like family and close friends. Some students experienced feelings of displacement as they left their home, which had provided them with safety, security and identity (McAndrew 1998). Thus, at the beginning of the studies, the role of university learning environments is to provide safe places, whereas later in the studies, their role is more to serve as sources of inspiration and challenges.

### CONCLUSIONS

This study started by asking what would be a creative and effective learning environment for master's level business students. A projective collage technique was used in order to reveal students' ideas and thoughts concerning their studies. The results show a wide range of meanings, and, indeed, the university years comprise an important phase in students' lives. Based on these meanings, the researcher constructed a metaphor of a safety net. It represents a creative and effective learning environment that can enhance the students' learning. The safety net is presented in Figure 1.

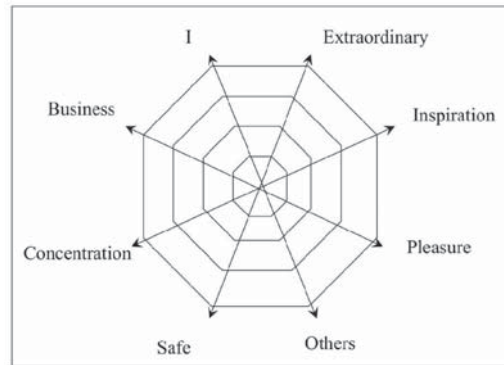


Figure 1. A safety net – dimensions of a creative and effective learning environment.

Teachers and faculty can support students' deep experiential learning processes by creating and maintaining a learning environment that supports creativity and effectiveness. This can be done on several levels, such as at the university, faculty, programme, course or class levels. Based on the results gained from this study, several practical suggestions can be made.

First, *business* is maintained at the level of professional know-how, for example, using context-dependent experiential learning, such as real-life applications and contextual problems. The focus is on gaining professional know-how. The business factor can enhance professional development by revealing the tacit knowledge involved in working life, for example, when students negotiate with entrepreneurs about a project plan. The business factor also includes the technical characteristics of the learning environment. This business can be softened with *pleasure*, that is, by introducing comfortable and pleasurable aspects into the learning environment. Coffee breaks, small talk with entrepreneurs, listening to music, surfing on the web, comfortable sofas and reading areas make the learning environment a second living room for students. This makes the learning experience more holistic and memorable.

Second, higher education learning is learning for one's own benefit, and thus the *I*-factor is important. Each student earns his or her own degree and this makes university learning individually-oriented. Teachers can support this by enhancing the professional development of students – that is, not only their skills and knowledge, but also self-understanding, self-esteem and career development. However, *others* and social capital are extremely

important for the learning environment. Teachers may enhance the creation of social capital by means of team-building exercises and team coaching. Teamwork can be used, but team coaching is needed to overcome the problems in teamwork. Working in different kinds of teams, some of which may be cross-functional, cross-organisational and/or international, will create wide social networks for students, even though at the same time it may mean new challenges for teamwork.

Third, for the students studying also meant balancing between concentration and inspiration. *Concentration* can be enhanced by means such as constructive alignment (Biggs 1996) in order to give students clear ideas on where to focus in learning. A teacher can explain clear learning objectives, plan methods suitable for reaching those objectives and assess the outcomes. This helps the students to know where to put their focus and what the most important things to study are. Students found that they could focus and concentrate in places like libraries, where it is quiet. Also in libraries one sees others who are studying, which may produce social pressure to stay focused. Teachers can bring *inspiration* into the learning environment in several ways. Inspirational guest speakers, new creative methods, new technical tools, moving to other places and doing something unexpected may help the students to “think outside the box”, get inspired and even reach a flow state. When students put their mind (concentration) and effort to the topic they often get inspired by the topic itself. For example, qualitative user data gathering for project work has often involved and inspired the students to work hard and learn more.

Fourth, the feeling of *safety* and basic security is important in enabling a person to be more creative and open-minded. Indeed, in the first phases, teachers need to foster a safe environment. Teachers can support discussion on different solutions and multiple ways of reaching the solutions. Also, it is eye-opening for the students when the same development problem is posed to many student groups and the groups reach very different but equally valid solutions by the end of the course. However, later on the students can be pushed further away from their comfort zones to try something *extraordinary*. This can be done by introducing new challenges into the project, such as by incorporating cross-functional or international teamwork. Working in special environments such as designers’ labs, overseas or simulators may provide extraordinary experiences.

This study has focused on constructing a learning environment that supports students’ learning. The model of the learning environment should not be considered to be set in stone. The social capital and the ownership of the learning environment are redesigned every time a new student group starts to work. Thus the learning environment needs to maintain flexibility over time; it should allow different learning, working and teaching styles to flourish. Teachers may enhance the learning experience by using the different dimensions presented in this paper to guide their teaching.

## REFERENCES

- Anderson, Laurel (2006), “Building Confidence in Creativity: MBA students,” *Marketing Education Review*, 16 (1), 91-6.
- Beard, Colin and John P. Wilson (2006), *Experiential Learning. A Best Practice Handbook for Educators and Trainers*, London, UK: Kogan Page.
- Biggs, John (1996), “Enhancing Teaching Through Constructive Alignment,” *Higher Education*, 32, 347-64.
- Biggs, John and Catherine Tang (2007), *Teaching for Quality Learning at University: What the Student Does*, Ann Arbor, MI: McGraw-Hill.
- Bransford, John D. (Ed.). (2000), *How People Learn: Brain, Mind, Experience and School*, Washington, DC: National Academics Press.
- Buzzard, Christopher, Victoria L. Crittenden, William F. Crittenden and Paulette McCarty (2011), “The Use of Digital Technologies in the Classroom: A Teaching and Learning Perspective,” *Journal of Marketing Education*, 33 (2) 131-39.
- Chism, Nancy Van Note (2006), “Challenging Traditional Assumptions and Rethinking Learning Spaces,” in *Learning Spaces*, ed. D.G. Oblinger, <http://www.educause.edu/LearningSpaces>: EDUCAUSE, 2.1-2.12.
- Chow, Kenny and Mick Healey (2008), “Place Attachment and Place Identity: First-Year Undergraduates Making the Transition from Home to University,” *Journal of Environmental Psychology*, 28 (4), 362-72.
- Eickmann, Paul, Alice Kolb, and David A. Kolb (2004), “Designing Learning,” in *Managing as Designing*, ed. R. J. Boland and F. Collopy, Stanford, CA: Stanford University Press, 241-47.
- Entwistle, Noel J. and Elizabeth R. Peterson (2004),

- “Conceptions of Learning and Knowledge in Higher Education: Relationships with Study Behaviour and Influences of Learning Environments,” *International Journal of Educational Research*, 41 (6), 407-28.
- Gonzalez, Gabriel R, Thomas N. Ingram, Raymond W. LaForge, and Thomas W. Leigh (2004), “Social Capital: Building an Effective Learning Environment in Marketing Classes,” *Marketing Education Review*, 14 (2), 1-8.
- Graetz, Ken A. (2006), “The Psychology of Learning Environments,” in *Learning Spaces*, ed. D.G. Oblinger, <http://www.educause.edu/LearningSpaces>: EDUCAUSE, 6.1 – 6.14.
- Herrington, Anthony and Jan Herrington (2005), *Authentic Learning Environments in Higher Education*, Hersey, PA: Information Science Publishing.
- Granitz Neil and Leyland Pitt (2011), “Teaching About Marketing and Teaching Marketing With Innovative Technology: Introduction to the Special Edition,” *Journal of Marketing Education*, 33 (2) 127-30.
- Hietanen, Olli and Anna Rubin (2004), *Oppimisympäristöjen tulevaisuus: Tutkimuksen ja yhteiskunnan haasteita*, Turun yliopisto: Tulevaisuuden tutkimuskeskus.
- Higgins, Steve, Elaine Hall, Kate Wall, Pam Woolner, and Caroline McCaughey (2005), “The Impact of School Environments: A Literature Review,” <http://www.designcouncil.org.uk/en/Design-Council/3/Publications/The-Impact-of-School-Learning-Environments/>.
- Jamieson, Peter, Kenn Fisher, Tony Gilding, Peter G. Taylor, and A.C.F. Trevitt (2000), “Place and Space in the Design of New Learning Environments,” *Higher Education Research and Development*, 19 (2), 221-36.
- Kolb, David (1984), *Experiential Learning: Experience as a Source of Learning and Development*, Engelwood Cliffs, NJ: Prentice-Hall.
- Koli, Hanne (2003), “Oppimisprosessin ohjaus uusissa oppimisympäristöissä,” in *Ammattikorkeakoulupedagogiikka*, ed. Kotila, Hannu, Helsinki, FI: Edita Publishing, 153-69.
- Koli, Hanne and Pasi Silander (2003), *Verkko-opetuksen työkalupakki – oppimisaihioista oppimisprosessiin [Tools for web-based teaching – from learning themes to learning process]*, Saarijärvi: Saarijärven offset.
- McGabe, Deborah Brown and Matthew L. Meuter (2011), “Student View of Technology in the Classroom: Does It Enhance the Seven Principles of Good Practise in Undergraduate Education?” *Journal of Marketing Education*, 33 (2) 149-59.
- McAndrew, Francis T. (1998), “The Measurement of ‘Rootedness’ and the Prediction of Attachment to Home-Towns in College Students,” *Journal of Environmental Psychology*, 18 (4), 409-17.
- Meeuwisse, Marieke, Sabine E. Severiens, and Marise Ph. Born (2010), “Learning Environment, Interaction, Sense of Belonging and Study Success in Ethnically Diverse Student Groups,” *Research in Higher Education*, 51, 528-45.
- Miles, Matthew B. and A. Michael Huberman (1984), *Qualitative Data Analysis: An Expanded Sourcebook*, Thousand Oaks, CA: Sage.
- Moisander, Johanna and Anu Valtonen (2006), *Qualitative Marketing Research: A Cultural Approach*, London, UK: Sage.
- Neill, Stren and Rebecca Etheridge (2008), “Flexible Learning Spaces: The Integration of Pedagogy, Physical Design, and Instructional Technology,” *Marketing Education Review*, 18 (1), 47-53.
- Olson, Jerry, Kristin Waltersdorff, and James Forr (2008), “Incorporating Deep Customer Insights in the Innovation Process,” in *Kundeorientierte Unternehmensführung*, ed. Hans H. Hinterhuber and K. Matzler, Gabler Verlag: Wiesbaden.
- Paladino, Angelina (2008), “Creating an Interactive and Responsive Teaching Environment to Inspire Learning,” *Journal of Marketing Education*, 30 (3), 185-88.
- Prince, Michael (2004), “Does Active Learning Work? A Review of the Research,” *Journal of Engineering Education*, 93 (3), 1- 9.
- Spiggle, Susan (1994), “Analysis and Interpretation of Qualitative Data in Consumer Research,” *Journal of Consumer Research*, 21, 491-503.
- Tuten, Tracy (2009), “Real World Experience, Virtual World Environment: The Design and Execution of Marketing Plans in Second Life,” *Marketing Education Review*, 19(1), 1-5.
- Umbach, Paul D. and Matthew R. Wawrzynski (2005), “Faculty Do Matter: The Role of College Faculty in Student Learning and Engagement,” *Research in Higher Education*, 42 (2), 153-84.
- Zaltman, Gerald and Robin Higie Coulter (1995), “Seeing the Voice of the Customer. Metaphor-



Asia-Pacific Advances in Consumer Research (Volume 10 ) 1292

- based Advertising Research,” *Journal of Advertising Research*, 35 (4), 35-51.
- Zaltman, Gerald (1997), “Rethinking Market Research: Putting People Back in,” *Journal of Marketing Research*, 34, 424-37.
- Zepke, Nick, Linda Leach, and Tom Prebble (2006), “Being Learner Centred: One Way to Improve Student Retention,” *Studies in Higher Education*, 31(5), 587-600.



## **TEACHING THE FUZZY FRONT END OF INNOVATION: REAL-LIFE APPLICATION WITH CROSS-FUNCTIONAL AND INTERNATIONAL TEAMS**

Minna-Maarit Jaskari, University of Vaasa, Finland

### **ABSTRACT**

The fuzzy front end of innovation presents one of the biggest opportunities for improving the overall innovation process and thus success in the marketplace. However, in the teaching of graduate students, universities have only recently begun to pay attention to this significant and uncertain phase. This paper attempts to develop and test course structures to suit the complex nature of the fuzzy front end and to shed light on student learning experiences in a cross-functional concept development course in an international context. The paper adopts an experiential learning perspective and relies on real-life experiences, students' trial and error processes, conceptualization, and reflecting on learning experiences. The results reveal student learning with respect to (a) understanding the process of innovation in the fuzzy front end, (b) cross-functional and cross-cultural teamwork, (c) project management, and (d) presentation skills. These skills help students build and experience a professional identity. Finally, the paper presents and discusses suggestions for developing graduate teaching in the fuzzy front end.

### **INTRODUCTION**

The successful launching of new products in the marketplace is vital for the long-term survival of companies (Cooper 1993). Product life cycles are becoming shorter, leading to fast-paced changes in the technological and competitive environment and in customer needs and wants. There is thus a strong need for companies to ensure the effectiveness and success of their product and service innovation processes (Herstatt and Verworn 2001). Moreover, researchers have shown that organizations that excel in the very early phases of product development, i.e., the fuzzy front end, are more likely to succeed in product development (Murphy and Kumar 1996; Kim and Wilemon 2002). Aligned with this, Koen et al. (2001) suggest that the fuzzy front end of innovation presents one of the greatest opportunities for improving the overall innovation process.

Graduate students all over the world are taught about product development, but the uncertain early phases of innovation have only recently started to receive attention (Martinsuo 2009). Also, the rapid changes in markets and technology as well as dynamic contexts set demands for teaching marketing and new product and service development (Smart, Kelley, and Conant 1999; Athaide and Desai 2005). Teaching should also emphasize creative problem solving and the ability to invent new products and customer experiences (Vogel, Cagan, and Boatwright 2005; Anderson 2006). Students should be engaged in real-life problem-solving situations where they experience the uncertainty of development work and are tasked with coming up with creative solutions based on their knowledge and experience. Furthermore, academia should provide a safe environment for trial and error as well as for reflecting on thinking and action in order to enhance both deep learning and practical skills. This also engages both academics and practitioners in a joint knowledge exchange process, as claimed by Hughes, Tapp, and Hughes (2008). One might raise the question whether and how this significant and uncertain phase – the front end of innovation – can be taught and learnt?

The aim of this paper is to describe the structures of pilot courses designed to suit the complex nature of the fuzzy front end in a cross-functional and international context, and present observations made by the participants (both students and teachers) in these courses. This paper adopts an experiential learning perspective on teaching the fuzzy front end of innovation. It relies on real-life experiences, students' trial and error processes, conceptualization, and reflecting on learning experiences.

First, I briefly introduce the literature on the fuzzy front end of innovation with a specific focus on its graduate teaching. Second, I present the pedagogical approach of experiential learning and the two international and cross-functional pilot courses. Third, I analyze the perceptions of learning and finally provide suggestions for future teaching and curriculum development.

### **THE FUZZY FRONT END OF INNOVATION**

The fuzzy front end of innovation is a concept that describes the very early phases and activities undertaken before the launch of a formal and well-structured new product development project (Koen et al. 2001; Reid and de Brentani 2004). There are several process models for the early phases (Herstatt and Verworn 2001); most often these models deal with opportunity identification and analysis, idea generation, idea evaluation and selection, concept definition and development, and strategic

business and program planning (Cagan and Vogel 2002; Koen et al. 2001). The main goal in the front end of innovation is to discover the right ideas, generate attractive product concepts, and identify suitable business models for the commercialization of the concept (Martinsuo 2009).

This early phase emphasizes a deep user-centered focus (Cagan and Vogel 2002). Cooper (1999) argues that listening to the voice of the customer leads to better success in the overall product development process. Researchers have suggested multiple methods for including customer insight into the process, for example ethnographic research and involving lead-users in the concept development (Von Hippel 1986; Herstatt and Verworn 2001).

The poor management of the front end of innovation causes many product problems and failures (Khurana and Rosenthal 1997). Herstatt and Verworn (2001) point out that both practitioners and researchers are wary of addressing the conflict between creativity and systematization. Some writers suggest that the early phases should be formally or systematically managed (Khurana and Rosenthal 1997; Kim and Wilemon 2002), whereas some suggest that they should be informal, iterative, or even chaotic (Koen et al. 2001). Herstatt and Verworn (2001) suggest that process models lead to success for incremental innovations with low market and technological risk, whereas innovations with a high market and/or technological risk need to emphasize a learning-based approach.

Cross-functional cooperation, where people from different disciplines and functions work together toward the same goal, has become an established strategy in new product development (Griffin and Hauser 1995; Song et al. 1996; Cooper 1999). In particular, companies seek to bolster cooperation between marketing, design, and engineering (Cagan and Vogel 2002) even though they may also combine other functions such as manufacturing. Different functions enable a project team to gather more diverse information and share ideas about what is commercially important, technically feasible, or difficult to manufacture (Kim and Wilemon 2002). If the cross-functional team members come from different backgrounds, this may increase the level of conflict. However, successful projects are not distinguished by the absence of barriers or conflicts but rather by how the members overcome them (Dougherty 1992). Especially when a new product opportunity is characterized by high levels of technological and market risks, investments in high levels of cross-functional cooperation are warranted to increase success in new product development activities (Gemser and Leenders 2011).

However, even if the literature supports cross-functional integration in the innovation process, companies struggle to manage this integration successfully in the front end of innovation (O'Connor and DeMartino 2006; Martinsuo 2009). This integration seems to be most difficult to achieve between designers and marketers. When Holm and Johansson (2005) studied the relationships between industrial designers, marketers, and engineers, they found that industrial designers and engineers tend to establish a fruitful working relationship once they realize how they can learn from each other. However, they found that marketers and designers are often rivals. According to their analysis, this rivalry is based on the different views marketers and designers hold on matters such as attitudes toward products, sense of professional identity, corporate identity, and creating value as well as the differences in their approaches to the consumer and market research. Holm and Johansson underline that companies need to create a better learning relationship between designers and marketers in order to foster innovation. This supports the idea that cooperation between marketing and design students in higher education could be a fruitful learning experience, yielding benefits even before they enter the workforce.

The global business environment also sets new challenges for new product development. Development projects need cross-cultural understanding and project members need skills in cross-cultural communication. If developers work in different locations, they must have communication skills in virtual platforms and cloud services.

To sum up, the fuzzy front end is considered: (1) to include the early phases in the product or service innovation process, (2) to rely on user-centered knowledge throughout the process, (3) to include opportunity identification and analysis, idea generation, evaluation, and selection, concept definition and development, and strategic business planning, (4) to be at least partially a structured and systematic process, and (5) to use cross-functional teams.

#### **PEDAGOGICAL APPROACH AND CASE COURSE DESIGNS**

Experiential learning sees learning as a process where knowledge is created through the transformation of experience. It emphasizes active, student-centered learning and proposes a constructivist theory of learning where social knowledge is created and recreated in the personal knowledge of the learner (Kolb 1984). Learning results from the interplay of affect, cognition, perception and behavior, and requires four learning modes: concrete experience, active experimentation, reflective observation, and abstract conceptualization (Kolb 1984; Petkus 2000).

*Concrete experience* involves sensory and emotional experience in some activity. It provides the basis for the learning process and should be designed to engage, motivate, and evoke affective aspects of experience (Kolb 1984; Petkus 2000; Young 2002). *Active experimentation* is the doing phase, in which the student engages in a trial-and-error process through fieldwork. Active experimentation spurs inactive (physically and/or mentally) learners to become active and involved learners (Petkus 2000; Young 2002; Wooldridge 2006). *Reflective observation* involves watching, listening, recording, discussing, and elaborating on the experience. It creates meaning from concrete experiences and active experimentation. This phase involves making connections across experiences without necessarily integrating theories and concepts. *Abstract conceptualization* involves integrating theories and concepts into the overall learning process. This phase involves in-depth thinking. Learners need to relate their experiences and experimental outcomes to textbook theories and concepts. (Kolb 1984; Petkus 2000; Young 2002)

Experiential learning is a powerful pedagogy for business and marketing (Young 2002). It has been applied in the principles of marketing (Wooldridge 2006), services marketing (Gremler, Hoffman, Keaveney, and Wright 2000; Petkus 2000), international trade shows (Helms, Mayo, and Baxter 2003), marketing ethics (Hunt and Laverie 2004), and new product design (Lovejoy and Srinivasan 2002; Cardozo et al. 2002; Martinsuo 2009).

The graduate teaching of new product development with cross-functional teams has inspired teachers around the world. Lovejoy and Srinivan (2002) report ten years of experience in teaching a multidisciplinary product development course. Cardozo et al. (2002) describe an experiential approach to teaching new product design and business development in a year-long course, and Vogel, Cagan, and Boatwright (2005) describe the process of a cross-functional user-centered product design course. Love, Stone, and Wilton (2011) report different design methods used in teaching user-centered design within a product development course. Recently, the fuzzy front end has also received more attention, as Martinsuo (2009) reports an experiment on teaching the fuzzy front end of innovation with a focus on team learning and cross-organizational integration. This paper takes an experiential approach and focuses on cross-functional and international teamwork within the context of the fuzzy front end of innovation.

The two pilot courses were organized within an EU-project called Responsible Market-Driven Design with financial support from the EU. The project was run in 2010 together with the Department of Marketing at the University of Vaasa (Finland), Western Finland Design Centre (Finland), and The Institute of Design at the University of Umeå (Sweden). Students for the courses were recruited through university courses and the design centre provided the premises and guidance in Finland. Two case organizations were selected based on the learning goals, accessibility, and the willingness of the organizations to develop their services with students. The first was Nolia, the biggest fair organizer in Northern Sweden, and the second was the City of Vaasa in Finland. The case organizations served as research objects and specialists for students. Both case organizations provided lectures, background information, and consulting. Thus their role was also to provide tacit knowledge about how these kinds of projects are run in practice.

#### **Pilot 1 – The Future Fair**

In the first case, the company wanted the students to give new insights into the development of the customer experience in future fair concepts. The international group of design and marketing students formed five teams to investigate this problem area in the spring of 2010. In the user-centered working process, they identified potential target groups, described user personas, and followed the customer journey by observing fairs. By applying design thinking and creative methods, they developed service concepts focusing on customer experience.

The participants engaged in intense teamwork with lectures and guidance on service design in both Umeå and Vaasa. However, the challenge facing each team was how to work together even when the members were physically apart. Thus this project allowed students to not only apply their theoretical knowledge on service design and branding, but also develop teamwork skills in an international environment through virtual media. The course lasted for five weeks and altogether 28 students participated. The concepts were presented both in Sweden and in Finland.

The outcomes of the future fair concepts included suggestions (1) to enhance customer experience by focusing on the perception of spring by using all five senses, (2) attracting more young visitors by setting up an experiential adventure park within the fair area, (3) increasing visual consistency by providing tools for exhibitors, (4) attracting more visitors by moving the fair into the city center, and (5) extending the customer journey to include pre- and post-fair activities.

**Pilot 2 – Festivals in Vaasa**

The second pilot project was held in the fall of 2010, when 17 marketing students from Finland and 17 design students from Sweden were divided into six teams to develop new festival concepts for the City of Vaasa. The joint project started with an intensive week that was held in two countries – the first two and a half days were held in Finland, after which all students took a ferry to Sweden, where the last two days were held. During the first day, teachers gave lectures on workshop methods and ideation methods (Michanek and Breiler 2009) after which the student groups planned and executed workshops with external guests and potential customers. After the workshop, the teams continued developing their early concepts, and at the end of the intensive week, each team had one to three strong concepts to be further analyzed and developed. After this the co-creation ended and the Finnish marketing students took on the work by taking the role of an event organizer. They focused on business concept development by conducting professional interviews, testing the concepts within potential target groups, analyzing the competitors, calculating financial forecasts, and creating the marketing plan for the event. Some groups continued working with design students also in later phases, but this was not obligatory.

The final concepts were: (1) I love biking – a city biking festival for all ages including theme biking, long-distance courses, and an attempt to break a new world record in spinning. (2) Harbor festival – an upbeat event for local and regional boat owners and others who enjoy boating. This festival features great jazz music and food on a late summer weekend. (3) Vaasa Fuzion – a professional conference specifically targeted at the energy industry worldwide. Combining business and pleasure, the conference allows business people to not only work hard but also enjoy the outstanding natural beauty of Finland with their families. (4) WasaFilmFestival – an outdoor picnic event planned to be held on a small island close to the city. It extends the traditional movie experience by screening films outdoors and asking customers to vote on which films will be shown. (5) Art and Design Vaasa – a meeting point where young artists can display and sell their creations. (6) St. Maria's feast – a pop-up restaurant that incorporates history with modern art in the ruins of St. Maria Church in Old Vaasa. Traditional music, theater pieces, and delicious food enhance the customer experience. These six festival concepts were presented to a professional jury, which then commented on them and evaluated how they should be developed further.

Both course structures emphasized that the front end of innovation includes the early phases of the innovation process. The processes relied on user-centered knowledge and used different creative and design methods in order to form an understanding of the end user. The background process was partially structured and explicitly written out for the students; however, they were also given opportunities to engage in unstructured creativity. In the first project, it included opportunity identification and analysis, idea generation, evaluation and selection, concept definition and development, and in the second project it also included business planning. The pilots were independent courses and altogether almost 60 students participated in them. Six teachers worked in these projects, and several specialists gave their input in the development process by lecturing, coaching, or being interviewed by the students. The media showed interest in both projects and reported on them, and all of this also supported the strategic goal of intense cooperation between universities.

Evidence for this study was collected in several ways: (1) we gathered formal student feedback after the courses from both the Swedish and Finnish students, (2) the Finnish students wrote reflective learning diaries during the courses that aimed at critically reviewing what and how they had learnt, (3) we held open and informal discussions with students and teachers during the courses, and (4) we held formal project meetings with teachers and other people participating in the project and these were reported in project memos. The main analysis has concentrated on the formal feedback, and reflective diaries, informal discussions, and project memos are used to reflect the teacher observations. The data was analyzed using the principles of qualitative content analysis (Miles and Huberman 1984: 55-58, Spiggle 1994). First, the data was read several times and coded through inductive analysis in order to capture its multiplicity. Second, the categories were gradually merged into more abstract themes based on their similarity and difference. These are reported and discussed below.

**LEARNING FROM THE FUZZY FRONT END PILOT COURSES**

The students' perceptions on their own learning can be classified in four broad themes. These themes are (a) understanding the process of innovation in the fuzzy front end, (b) cross-functional and cross-cultural teamwork, (c) project management, and (d) presentation skills. For the students, this knowledge and skills lead to better self-understanding of their capabilities, strengths and weaknesses, as well as feelings of self-confidence. Thus, during the course, they gained a stronger sense of their professional identity. These aspects, together with observations from the teachers, are elaborated below.

### **Understanding the process of innovation in the fuzzy front end**

The students valued the practical orientation of the course. The theoretical background of managing the fuzzy front end in this course was built in as a guiding process for the students; however, they had latitude to come up with innovative ideas and engage in creative thinking. The theoretical knowledge on marketing, product development, and design differed between students. Even if the supporting process was the same for all the students, they had difficulties with understanding each other's viewpoints. The students would have liked to have more lectures on each other's professions in order to understand their viewpoints better. However, this was set up on purpose in order to establish tensions for the students to solve, as proposed in the experiential learning cycle.

A concrete learning outcome dealt with new, creative methods that were used in concept development. Based on idea management (Michanek and Breiler 2009) and design thinking (Brown 2008), the students ran creative workshops. These workshops aimed at discovering both deeper meanings from user groups and development gaps where new concepts would add most value. In addition to being workshop members, all students participated in both planning and running a workshop. The methods used in the workshops included a set of visual materials such as photos, collage techniques, mood boards, mapping exercises, creative prototyping, and playing games. The students were able to choose themselves which methods to use, and different groups used different methods.

The design students were familiar with creative thinking – the “free your mind approach” – whereas marketing students were much more goal-oriented, analytical, and desperately looking for the right answer. This difference in approaches sparked a great deal of discussion within the groups; often the marketing students did not “buy” the reasons for the use of creative methods if the goal of the exercise was not described well. The design students also commented on this in their feedback forms, as many of them felt that it is difficult to hold creative workshops when the other participants are not design students.

The challenge in experiencing the fuzzy phase was reported as difficulties with, for example, not understanding what their target was or what to do next. This feeling of uncertainty follows the aim of experiential learning, where students are expected to come across ideas that they do not understand or identify tensions between what they observe and what they have done before. However, in the end these hands-on courses – during which meanings need to be discovered based on deep understanding of potential customers, and then shaped into an understandable, visual concept that is designed to fit the needs of different parties and eventually presented to a jury of specialists – seemed to make the development process more concrete and easier to understand.

### **Cross-functional and cross-cultural teamwork**

In both courses the teachers formed the teams before the courses started. During the first project, where students came from different countries, one coach was assigned to concentrate on cross-cultural teamwork. In the second project, the same teachers guided both the development process and the teamwork process. Teamwork seemed to be the main reason why some projects ran into difficulties. The differences in objectives and motivation, working styles between different professions or differences in cultures hindered the teamwork and thus the project work in some phases and in some cases.

The case universities employ different approaches to teamwork within design and marketing education. Design students often start working in teams in order to gain user data and understand the market. They share this information, but usually end up working on their own individual design. Within marketing education, group work is stressed throughout the curricula, and many of the learning exercises are based on group work. Often the group members add value to final output, but sometimes the students do not actually work as a team, but subdivide the work between the group members, complete each part individually, and eventually combine the pieces together. This may be a reason why some of the Finnish students explained that they learnt about real teamwork, where everybody's input is important. Indeed, here lies the difference between group work and teamwork. These case courses forced students to rely on each other in the group and work together throughout the process in order to develop a deep and shared understanding of their own concept.

Not surprisingly, students noted that cross-cultural understanding and communication affected learning. In the first project, the students came from many countries on different continents: Europe, North America, and Asia. They represented a wide variety of cultures and this played a crucial role in teamwork. Also the fact that the teams worked partially in different geographical locations made this challenge harder. To support the teamwork, the coach discussed the cross-cultural differences with each group and in this way the matter was taken up explicitly. The short working time (5 weeks) with only two physical meetings in the same place meant that most of the teams only reached the initial phase of teamwork, in which

no real tension, disagreement, or conflict occurred. Also, in the learning diaries the discussion about cultural differences was presented mostly in a shallow manner, using stereotyped descriptions.

In the second project, the cross-border cooperation played a major role, as the students were Finnish and Swedish. They worked together for a longer period and with a greater focus on goals and teamwork. They also spent some free time together and got to know each other more personally. As a result, their teamwork became more intense, they were more eager to argue with each other and, furthermore, they developed greater cross-cultural understanding.

### **Project management**

Project management was one of the explicit learning objectives and was thus emphasized throughout the course. In the first course, the structure was tighter and tasks were divided more clearly for each week. In the second project, the Finnish students were required not only to complete the exercises given to them, but also to take responsibility for their own development goal and both plan a project and carry it out. Weekly meetings served as project management meetings, where different teams presented the state of their project to other students and teachers. The development of project management skills was clearly seen among marketing students because they were not as familiar with project work as the design students. The most critical point in project management was time management. The students had difficulties to schedule different tasks into their project plan and to estimate how much time they have to use in different tasks.

Swedish design education is based on a project curriculum, and thus design students are very familiar with running projects. On the other hand, Finnish marketing education takes a more theoretical and scientific approach and is module-based, with less of an emphasis on basic project management skills. Also, within the design curriculum, the students mostly work on one project at a time. Marketing students take around six courses at the same time. This difference results in different approaches to time management. This became a challenge in the first project, where the Finnish students tried to study other courses at the same time and the Swedish students felt that the Finns were not putting as much effort into the work as the Swedes. During the second course, we organized an intense week with no other lectures in order to tackle this challenge.

### **Presentation skills**

The groups gave several presentations about their own projects to the other groups and to case companies. Oral, visual, and written presentations became very important means of both communication and evaluation of projects. The presentations aimed at informing others about the status of the project and also served as discussion platforms for all groups. Presentations were emphasized in both case projects and mimicked typical working life situations. The presentations were held daily when working jointly in Sweden or in Finland and weekly later on. The final presentations of the first project were given to project partners. In the second project, the final presentation imitated a corporate marketing presentation with a creative twist. Its format was modeled on a television reality show, with a specialist jury evaluating the presentations. This seemed to inspire the students and they made an impression on the jury with the professionalism of their presentations. This provided a final boost to their self-confidence, as both in their learning diaries and in informal discussions the students addressed the challenge of this presentation and also how happy surviving and succeeding made them feel.

During the second course, the development of presentation skills was more apparent. Toward the end of the course, at which point the students knew their own project inside out, the marketing students were able to develop their own personal styles when giving presentations orally, visually, and in writing. As one student reflected, she discovered that she was in fact an effective presenter, even though she had been afraid of it before. Indeed, she did not seek to inspire with loud and dramatic rhetoric, but instead was calm and assertive. We noted that skills improved at the group level as well, as some groups distinguished themselves from the others in their presentations by using visual or other aids. Also, the group members worked together increasingly effectively in presentations, supporting each other and acting as a team.

The themes presented above reflect the learning outcomes of the two pilot courses. The learning diaries, even if there is variation between students, in best cases demonstrate deep learning as the students described not only what they did, but also how they learnt and how they had changed their views on marketing and themselves as marketers. During the first course, the group consisted of students from different backgrounds. There were no clear roles for students and this resulted in confused feelings about their roles in the project and how they should add value. This was not solved during the first course and that is why the second course concentrated on only marketing and design students with clear roles. The result was apparent: the students both understood their role and also developed their professional identities – either as designers or marketers – during the course. Students described both who they are as marketers or designers and also how they differ from each other. These



aspects were taken up in the beginning of the second pilot as an exercise and also in feedback forms, where the students were asked about what they learnt of their own profession. In the learning diaries, the marketing students reflected a great deal on their own professional development during the course.

### CONCLUSIONS

This study has focused on teaching the fuzzy front end of innovation in international and cross-functional teams. The visions for the projects were demanding; we did not concentrate solely on one aspect of teaching the fuzzy front end, but aimed to arrive at a holistic view and an understanding of how it is to work within the fuzzy front end of innovation in real life. We established cross-functional teams, used real-life cases and methods from both design and marketing, and launched the projects in an international context, with students actually traveling between Finland and Sweden. In terms of the pilot stage, both of the projects were successful; the learning objectives were met, the student diaries reflect deep learning as opposed to shallow learning as well as development of their self-knowledge and professional identity, the local media has been interested in these pilots, and the case companies have acquired valuable input for their own development processes.

The experiential learning approach seems to fit well to teaching the fuzzy front end. The real-life applications provide concrete experience and active experimentation, for example, in the form of creative workshops, user studies, and creation of concepts. However, instead of merely doing things, these projects succeeded in enabling students to reflect on and understand how and why one could and should do things. The theoretical background of the fuzzy front end and design thinking support abstract conceptualization and thus aim to support students' deep learning. The context of cross-functional and international fuzzy front end allows for interplay between affect, cognition, perception and behavior.

Cross-functional teamwork is challenging but rewarding. Common goals, new perspectives, new ways of working, and new tools all create an understanding of different ways of working in the fuzzy front end. For example, both marketers and designers focus on the customer. However, they take different approaches to researching and understanding the customer and to how they include that information in the development process. This also sets challenges for process coaching – how to give some structure to students in order to enhance the learning process, but so as not to either hinder their creative thinking or thwart new innovative solutions, as in the fuzzy front end. In the first project, we had students from many backgrounds, while in the second project, we only had designers and marketers. The clear roles enhanced the learning process and the development of professional identity and should also be emphasized in the future, even when the functions working together may differ.

The student learning outcomes encourage further work on real-life applications of the fuzzy front end in cross-functional and international teams. These pilot courses have suggested two different structures to implement joint projects into curriculums. However, there are a number of structural and practical challenges that are most evident in cross-cultural contexts. Universities need to consider, for example, distinct curriculums, learning cultures, pedagogical and scientific perspectives, differences in learning objectives, methods and assessment, and working habits when planning and running joint courses. In that way, the distinct characteristics of the partners become a source of learning for both students, teachers, universities, and case companies.

### REFERENCES

- Anderson, L. 2006. "Building Confidence in Creativity: MBA students." *Marketing Education Review* 16(1), 91 – 96.
- Athaide, G. A. & Desai, H. B. 2005. "Design and Implementation of an Interdisciplinary Marketing/Management Course on Technology and Innovation Management." *Journal of Marketing Education* 27 (3), 239 – 249.
- Brown, T. 2008. "Design Thinking." *Harvard Business Review* June, 84 – 92.
- Cagan, J. & Vogel, C. 2002. *Creating Breakthrough Products: Innovation from Product Planning to Program Approval*. Financial Times Prentice Hall, Englewood Cliffs, NJ.
- Cardozo, R. N., Durfee, W. K., Ardichvili, A., Adams, C., Erdman, A. G., Hoey, M., Iaizzo, P.A., Mallick, D.N., Bar-Cohen, A., Beachy, R. & Johnson, A. 2002. "Experiential Education In New Product Design And Business Development." *Journal of Product Innovation Management* 19, 4 – 17.

- Cooper, R. G. 1993. *Winning at New Products: Accelerating the Process from Idea to Launch*. Reading, MA: Addison-Wesley.
- Cooper, R. G. 1999. "The Invisible Success Factors in Product Innovation." *Journal of Product Innovation Management* 16, 115 – 133.
- Dougherty, D. 1992. "Interpretative Barriers to Successful Product Innovation in Large Firms." *Organizational Science* 3, 179 – 202.
- Gerwin, D. & Barrowman, N. J. 2002. "An Evaluation of Research on Integrated Product Development." *Management Science* 48 (7), 938 – 953.
- Gremler, D. D., Hoffman, K. D., Keaveney, S.M. & Wright, L. K. 2000. "Experiential Learning Exercises in Services Marketing Courses." *Journal of Marketing Education* 22(1), 35 – 44.
- Griffin, A. & Hauser, J. R. 1996. "Integrating R&D and Marketing: A Review and Analysis of the Literature." *Journal of Product Innovation Management* 13, 191 – 215.
- Helms, M. M., Mayo, D. T. & Baxter, J. T. 2003. "Experiential Learning: The Benefits of Trade Shows for Marketing Students and Faculty." *Marketing Education Review* 23(3), 17 – 25.
- Herstatt, C. & Verworn, B. 2001. *Managing the "Fuzzy Front End" of Innovation*. Working Paper No. 4, Technical University of Hamburg.
- Holm, L. & Johansson, U. 2005. "Marketing and Design: Rivals or Partners?" *Design Management Review* 16(2), 36 – 41.
- Hughes, T., Tapp, A. & Hughes, R. 2008. "Achieving Effective Academic/Practitioner Knowledge Exchange in Marketing." *Journal of Marketing Management* 24(½), 221 – 240.
- Hunt, S. D. & Laverie, D. A. 2004. "Experiential Learning and the Hunt-Vittel Theory of Ethics: Teaching Marketing Ethics by Integrating Theory and Practice." *Marketing Education Review* 14(3), 1 – 14.
- Khurana, A. & Rosenthal, S. R. 1997. "Integrating the Fuzzy Front End of New Product Development." *Sloan Management Review* 38(2), 103 – 120.
- Kim, J. & Wilemon, D. 2002. "Strategic Issues in Managing Innovation's Fuzzy Front-End." *European Journal of Innovation Management* 5(1), 27 – 39.
- Koen, P., Ajamian, G., Burkart, R., Clamen, A., Davidson, J., D'Amore, R., Elkins, C., Herald, K., Incorvia, M., Johnson, A., Karol, R., Seibert, R., Slavejkov, A. & Wagner, K. (2001). "Providing Clarity and a Common Language to the "Fuzzy Front End." *Research Technology Management* 44, 46 – 55.
- Kolb, D. 1984. *Experiential Learning: Experience as the Source of Learning and Development*, New Jersey: Prentice-Hall.
- Love, E., Stone, D. E. Jr. & Wilton, T. 2011. "Teaching User-Centered Design in New Product Development." *Marketing Education Review* 21(1), 29 – 33.
- Lovejoy, W. S. & Srinivasan, V. 2002. Perspective: "Ten Years of Experience Teaching a Multi-Disciplinary Product Development Course." *Journal of Product Innovation Management* 19, 32 – 45.
- Martinsuo, M. 2009. "Teaching Fuzzy Front End of Innovation: Experimenting with Team Learning and Cross-Organisational Integration." *Creativity and Innovation Management* 18(3), 147 – 159.
- Michanek, J. & Breiler, A. 2009. *The Idea Agent – a Handbook on Creative Processes*. Malmö, Idélaboratoriet.
- Miles, M. B. & Huberman, A. M. 1984. *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA, Sage.

- Murphy, S. A. & Kumar, V. 1996. "The Role of Predevelopment Activities and Firm Attributes in New Product Success." *Techovation* 16(8), 431 – 441.
- O'Connor, G. C. & DeMartino, R. 2006. "Organizing for Radical Innovation: An Exploratory Study of the Structural Aspects of RI Management Systems in Large Established Firms." *Journal of Product Innovation Management*, 23, 475 – 497.
- Petkus, E. Jr. 2000. "A Theoretical and Practical Framework for Service-Learning in Marketing: Kolb's Experiential Learning Cycle." *Journal of Marketing Education* 22(1), 64 – 70.
- Reid, S. E. & de Brentani, U. 2004. "The Fuzzy Front End of New Product Development for Discontinuous Innovations: A Theoretical Model." *Journal of Product Innovation Management* 21, 170 – 184.
- Smart, D. T., Kelley, C. A. & Conant, J. S. 1999. "Marketing Education in the Year 2000: Changes Observed and Challenges Anticipated." *Journal of Marketing Education* 21(3) 206 – 216.
- Song, X. M., Neeley, S. M. & Zhao, Y. 1996. "Managing R&D-Marketing Integration in the New Product Development Process." *Industrial Marketing Management* 25, 545 – 553.
- Titus, P. A. 2000. "Marketing and the Creative Problem-Solving Process." *Journal of Marketing Education* 22(3), 225 – 235.
- Vogel, C. M., Cagan, J. & Boatwright, P. 2005. *The Design of Things to Come. How Ordinary People Create Extraordinary Products*. Upper Saddle River, New Jersey: Wharton School Publishing.
- Von Hippel, E. 1986. "Lead Users: A Source of Novel Product Concepts." *Management Science* 32, 791 – 805.
- Wooldridge, B. R. 2006. "The Power of Perception: An Active/Experiential Learning Exercise for Principles of Marketing." *Marketing Education Review* 16(2), 5 – 7.
- Young, M. R. 2002. "Experiential Learning = Hands-on + Minds-on." *Marketing Education Review* 12(1), 43 – 51.



## Making Sense of Marketing Students' Professional Identity Construction through a Multidisciplinary Project Course

Minna-Maarit JASKARI\* (University of Vaasa, Finland) – [minna-maarit.jaskari@uwasa.fi](mailto:minna-maarit.jaskari@uwasa.fi)

### Abstract

The aim of this study is to analyse how marketing students make sense of their professional identity during the multidisciplinary service concept development course. The theoretical discussion on the construction of professional identity is based on social identity theory and identity processes guiding principles of distinctiveness, continuity, self-efficacy, and self-esteem. The qualitative data is gathered from a university level project course, where design and business students work on developing a new festival concept for the city. The data consists of feedback forms from both design and marketing students and learning diaries, in which sixteen Finnish marketing students wrote about their thoughts and feelings about a multidisciplinary learning context. The data is analysed using qualitative content analysis. The results show how students use the principles of identity construction in making sense of their own profession now and in the future. Professional identity evolves in interaction between own profession and other professions and the knowledge and skills needed in own profession become more evident. The practical implications on how educators can enhance the professional identity development among students are presented.

**Keywords:** professional identity, higher education, marketing students

### 1. Introduction

The aim of this article is to analyse how marketing students make sense of their professional identity during the multidisciplinary service concept development course. Professional identity is a central theme in career literature (Ibarra, 1999), as career success is often associated with successful professional identity construction (Slay & Smith, 2011). Hence, it is interesting to understand how educators can support the construction of professional identity already during studies.

This study concentrates on university level marketing students' construction of professional identity. Marketing itself is a complex profession, as different education paths may develop the skills needed in various jobs within multifaceted marketing field. This specific study is focused on the marketing study programme leading to the degree of Master of Science in economics or business administration that can be achieved in one of the twelve Schools of Economics and Business Administration in Finland. This degree allows a person to use a honorary title "economist" in Finland and get a membership in Seife, The Finnish Association of Business School Graduates. Consequently, this degree also represents something called achieved status (Deaux, 2001).

The business school in the University of Vaasa represents one the oldest business schools in Finland, dating back to the 1960s. It is still one of the biggest business educators in Finland, giving degrees to 186 bachelors, 170 masters, and 3 doctors in economics and business administration (internal statistics 2010) in 2010. The department of marketing is one of the four departments within the business school. In 2010, it gave degrees to 31 bachelors, 37 masters and one doctor.

This article proceeds as follows: first the construction of professional identity is discussed based on social identity theory and identity processes guiding principles of distinctiveness, continuity, self-efficacy, and self-esteem (Breakwell, 1986, 1992). Then, the multidisciplinary course context is described and the feedback forms and learning diaries as well as data are presented. The results describe in what ways students make sense of their professional identity through the principles of identity construction. Finally, practical implications for educators are suggested.

---

\* Address for correspondence: Minna-Maarit Jaskari, University of Vaasa, Department of Marketing, Wolffintie 32, 65200 Vaasa, Finland. (Phone: +358 500 800 246 – email: [minna-maarit.jaskari@uwasa.fi](mailto:minna-maarit.jaskari@uwasa.fi))

## 2. The construction of professional identity

Professional identity is one type of social identity and refers to those aspects of a person that are defined in terms of her group membership (Deaux, 2001; Hogg, 2006). One's professional identity is a definition that is usually shared with countless other people, many of whom one may not know. In contradiction to other types of social identity, such as ethnicity or gender, professional identity is chosen by a person, and can be considered as an achieved status (Deaux, 2001).

### 2.1 Definition of professional identity

Professional identity is defined as "the relatively stable and enduring constellation of attributes, beliefs, values, motives, and experiences in terms of which people define themselves in a professional role" (Ibarra, 1999; Slay & Smith, 2011). This constellation is shared by members of professional groups and used to compare and differentiate between other professional groups (Glaser-Secura, Mudge, Bratianu, & Dumitru, 2010). Furthermore, a more constructivist view that understands professional identity as a social, continuously ongoing, dialectical process that is produced in situations involving interaction, learning, and practical professional activity is adopted in this study (Ryynänen, 2001: 22). Hence, professional identity is not something that a person has, but something that is used in order to make sense of oneself as a professional (Beijaard, Meijer & Verloop, 2004).

Indeed, professional identity is defined as an ongoing process of interpretation and re-interpretation of experiences and it can be seen as a process of lifelong learning (Beijaard et al., 2004). The professional identity formation does not only answer the question "Who am I as a professional?" but also "Who do I want to become?" (Beijaard et al., 2004). Cooper and Olson (1996) continue that professional identity is a multifaceted concept that is influenced by historical, sociological, psychological, and cultural factors. Akkerman and Meijer (2011) identify three characterisations of professional identity that are the multiplicity, the discontinuity, and the social nature of identity. These characterisations stress that professional identity is not a stable or fixed entity but an ongoing process, dynamic concept that shifts with time and context.

Professional identity can be seen as a twofold concept. First, the concept refers to what a person himself finds important in his professional development based on his experiences, work, and personal background. At the same time, the concept refers to the influence of the conceptions and expectations of other people, what a person in a particular profession should know and do (Beijaard et al., 2004). Coldron and Smith (1999) point to this tension of personal and socially structured dimensions and argue that, for example, being a teacher is a matter of the teacher being seen as a teacher by himself and by others; it is a matter of arguing and then redefining an identity that is socially legitimated. Thus the person is in the center, but he is socially influenced.

### 2.2 The construction of professional identity

There has been an increased interest in the process of professional identity construction (Clarke, Brown, & Hailey, 2009; Sutherland, Howard, & Markauskaite, 2010), and there are several suggestions on how the construction of professional identity evolves. Already Erikson (1968) emphasised the constructive nature of identity formation, in which processes of evaluation, selection, and organisation of self-perceptions are essentially involved. Slay and Smith (2011) suggests that professional identity is shaped in three ways. First, it is a result of the socialisation process and rhetorics, where one is provided with information regarding the meanings associated with a profession. Second, individuals adjust and adapt their professional identity during periods of career transition. Third, life as well as work experiences influence professional identity by clarifying one's priorities and self-understanding. Ibarra (1999) suggests that the process of professional identity construction involves observing role models to identify potential identities, experimenting with provisional selves and evaluating experiments against internal standards and external feedback.

Breakwell (1986: 9) models a social identity process theory that seems promising, also in understanding the formation of professional identity. She treats identity as a dynamic social product that resides in psychological processes but cannot be understood except in relation to its social context and historical perspective. She sees identity as an integrated entity that develops through the processes of a) assimilation and accommodation, and b) evaluation. Assimilation refers to the absorption of new components into the identity structure; accommodation refers to the adjustment which occurs in the existing structure so as to find a place into which to fit new elements. The process of evaluation entails the allocation of meaning and value to identify content of the social world. (Breakwell, 1986: 23).

According to Breakwell, the two identity processes described above are guided by four principles: distinctiveness, continuity across time and situation, self-esteem, (Breakwell, 1986: 24) and self-efficacy (Breakwell, 1992). *Distinctiveness* means a person's desire to maintain personal or group based distinctiveness or uniqueness (Breakwell, 1986: 23). Within the professional identity discussion this may refer to a person's desire to keep the profession distinct from other profession. For example, it may be described how it is to be a marketer and how that differs from other professionals. *Continuity* refers to a person's desire to preserve continuity of the self-concept. It is defined as continuity over time and situation between past and present self-concepts (Breakwell, 1986). It is not the same as consistency, as continuity can be associated with growth and change which require inconsistencies between past and present (Breakwell, 1993). *Self-esteem* refers to a positive evaluation of oneself or the group with which one identifies. It is concerned with a person's feelings of worth and social value. The desire for self-esteem is argued to be a basic principle of every theory of identity; people will seek to achieve and maintain self-esteem. Indeed, self-esteem could be treated as superordinate of all principles (Breakwell, 1993). *Self-efficacy* is a person's belief of his ability to be effective in achieving his goals (Breakwell, 1986). The lack of self-efficacy may appear as feelings of futility, alienation, and "helplessness" (Breakwell, 1993). Expectations about self-efficacy are derived from three major sources, mainly from past performances, from expectations of what is necessary for the task to be completed, and from estimates of one's capacity made by other people. Self-efficacy may be raised, if some kind of emotional arousal occurs (Breakwell, 1992: 36).

### 2.3 Earlier studies related to professional identity construction

Research on professional identity emerged in different professions, such as teachers (Beijaard, 1995; Beijaard et al., 2004; Beijaard, Verloop, & Vermunt, 2000; Berry, Clemens, & Kostogriz, 2007; Connelly & Clandinin, 1999), doctors (Niemi, 1997; Pratt, Rockmann, & Kaufman, 2006; Rynänen, 2001), educational psychologists (Gaskell & Leadbetter, 2009), academics (Archer, 2008), black journalists (Slay & Smith, 2011), and marketers (Bennet, 2011). Teachers' professional identity, for example, research has grown to a separate research area (Beijaard et al., 2004). Indeed, teachers, lawyers, and doctors represent seemingly coherent professions and as such provide an interesting context for understanding professional identity and its construction.

Even though Becker et al. (1961: 420, cited in: Pratt et al., 2006) argue that students do not take on a professional role while they are students; the time spent in the university more or less acts as a seed for later development. Identity formation consists of exploring the available alternatives and committing to some choices and goals. Indeed, it is essential for the development of professional identity that students develop a realistic view of the challenges and opportunities of the profession. Thus, also students and the time of studies can be active in the process of constructing professional identity (Hallier & Summers, 2011; Niemi, 1997).

Indeed, there are studies that focus on professional identity construction during study time. For example, Dannels (2000) examined how classroom discourse and practice construct professional identities for students as future engineers. Rynänen (2001) studied the construction of physician's professional identity through exploring students' critical experiences in medical education. Pedagogical approaches are thought to enhance professional identity. Gilardi and Lozza (2009), for instance, describe an inquiry-based course that is designed to support psychology student's professional identity development through reflective practice. Glaser-Secura et al. (2010) analysed the role of different learning activities in the formation of business students' professional identity. Hallier and Summers (2011) examined how human resource management students construct a sense of professional identity over the course of their degree. Stenberg (2011) studied the use of identity work in order to promote student teachers' professional development.

It seems that during the study time, answers to questions such as "Who am I?", "Who do I want to be?", and "How am I achieving it?", describe the early development of professional identity. Understanding how the professional identity construction begins, the educators may also enhance its development. In this study, professional identity is thus understood as a constellation of attributes, beliefs, values, motives, experience, and expectations that people use to make sense of themselves as professionals. It is not seen as a stable or fixed entity, but as ongoing process that evolves through interactions between people, and which is multifaceted, intertwining personal, social, and cultural perspectives.

### 3. Methodology

The study context for this article is a practical master level concept development course for marketing students in the University of Vaasa, Finland. The course is called "Concept Factory" and aims to give students a creative, multidisciplinary, teamwork experience while tackling a development problem for a certain company or organisation. The course is run every autumn and the students may achieve 5-15 ects depending on the challenge of their development problem. The pedagogical background for the project lies in experiential and inquiry based learning. Autumn 2010 the course was run together with Umeå Design Institute from Sweden, thus the course emphasised both multidisciplinary and international aspects within concept development. Sixteen students from both countries participated in the course. The topic for the concept development was "New festival concepts for a city of Vaasa". The students started with an intensive workshop week, where they worked in multidisciplinary groups, first in Vaasa (Finland) and then in Umeå (Sweden). After the intensive cooperation week, each group had developed three potential festival concepts. Finnish business students continued working with the concepts, tested them on a market, developed a business plan and presented the concept for professional jury. Altogether six new business concepts were developed and evaluated.

The qualitative data used for this study consists of written feedback collected after intensive working week from 32 students from both countries and sixteen learning diaries written by Finnish marketing students after completing the business plan for the developed concept. This data is analysed using qualitative content analysis (Miles & Huberman, 1994). The data was first read several times. Then I started to categorise the data and kept asking how the students write about different aspects of themselves in relation to marketing profession. While writing the first draft of data description, different themes started to emerge and these themes were compared to different theoretical frameworks. At this time, I familiarised myself with the social identity process theory and the four identity principles presented by G.M. Breakwell. I used these principles to structure my findings. Thus, the data analysis process has been abductive in nature, keeping the eyes open to both the theoretical understanding and the originality and distinctiveness of the data.

The data extracts are translated from Finnish language. They are coded so that the first number refers to number of the learning diary, F or M to the sex of the student, and the following number to a page number in that particular learning diary.

### 4. Principles in professional identity construction

The course feedback and learning diaries show how students make sense of their professional identities as marketing students and future marketing professionals. The professional identity evolves by making distinction between marketing profession from other professions, by making sense how marketers work now and in the future, by understanding the efficacy within marketing profession, and by understanding how all these aspects result in higher self-esteem as marketer.

#### 4.1 Marketers are distincted from other disciplines and other business students

Marketing students made distinctions between marketing, other business students (such as accounting students), and designers. Most evident, due to the context, was the distinction between marketing and design students. It came evident during the intensive week, where students were asked to organise a workshop for external guests in order to find ideas for the concept ideation phase. Marketers described design students as creative and used to work with open problem definitions. The creative workshops included several steps requiring guests to participate in map construction, mood boards, collage building, word associations, and other creative exercises. However, marketing students described that methods were not always chosen based on their quality for problem solving. As one student described:

*"In this phase (workshop planning) the differences between different ways of thinking became apparent, as we marketing students started to plan the workshop based on what results we wanted to gain and design students emphasised free ideation and the creative process itself." (5F4)*

Marketers described themselves feeling awkward in an open problem situation, not having concrete goals set for them. Also the idea of (very) creative workshops made them think about what their expectations towards the workshop are. Indeed, within marketing studies, students are encouraged to interview users or hold focus



group sessions. These different ways of thinking and working were handled differently in different group. In some groups the difference was described and made explicit, but the difference between professions was accepted and mostly appreciated. In other groups, the diverse way of working was rejected and confronted and the own way of working was argued for. However, in the feedback forms, both professional groups wrote how explaining their own standpoints made them understand more about their own profession and them as professionals.

*“While planning workshops, our group drifted to its first contradiction. The students of the design school were used to use workshops in their studies and their experience was helpful. Contradiction was raised, because design students started with the idea that first we decide on pleasant methods for workshop and only then we think what we achieve with them. At least for me this way of thinking feels wrong because I have earlier learnt many times that it is important to start by defining the goal.” (3M2)*

#### 4.2 In the future in marketing profession I need these skills...

Continuity in professional identity is mostly described in terms of the skills needed in the future profession, thus continuity in time. It implies that students will hold their student identity while studying, but are preparing themselves for a particular set of skills and knowledge needed when working in marketing profession. The expected skills show how they see that a marketer needs to behave in working environment. Particular skills that this context made them to think were project and teamwork skills, presentation and visualisation skills and working in multidisciplinary contexts. Even though all those skills are needed also in their later studies, they described the use of those skills through their future profession. All these were described as important aspects in their own profession.

*“I feel that my presentation skills have developed a great deal during this course because there have been so many presentations. I have always been nervous about presentations and this has meant that I rely on notes and avoid contact with public. As my confidence has grown, I have realised that my speech has become more free and fluent and keeping the eye contact with the public have become more natural. The development of self-confidence and presentation skills is important for future working life. In the field of marketing one cannot avoid presentations and it is important, what kind of impression one delivers through presentations.” (1F12)*

#### 4.3 We marketers are goal-oriented, practical and efficient

Self-efficacy became apparent in the multidisciplinary context that challenged the way of working. Business students described how they have been taught to be goal-oriented, effective, and analytical. They felt insecure in the beginning as it was quite open what should be done and how to proceed in the project. They would have liked to have more guidelines and a more direct problem definition. This was discussed in the learning diaries in two ways – firstly describing, how I am used to work and second, by making distinction from design students.

*“The difference in the ways of thinking between different disciplines is not just a cliché; we react to different matters in different ways. Design students concentrated on visualisation and abstract ideas, whereas business students are thinking about practical matters, profitability and most of all goal orientation.” (8F11)*

*“Traditionally we have been taught a realistic and goal-oriented way of thinking in business school, so the unrealistic aspects and uncertainty of results seemed to be insane, something that belongs to art and theatre schools.” (9F4)*

Even if later, the open mindset and creative techniques were described as innovative, interesting and worth learning, the effectiveness, business-like approach and customer orientation were described as marketers' way of working. One of the students described the situation where three of them went to interview potential target group for their business conference concept. The group had severe problems in group work and she explained this:

*“I felt problematic that not all of us three had familiarised the presentation material and its content. It doesn’t only give an unprofessional impression but diminishes the possibility to gain information from the interview.” (2F6)*

#### 4.4 Hard work resulted to better self-confidence

Self-esteem came up in writings about beating the demanding challenge of the project work. Students put a lot of effort in the project work, some described the project to become their own, how they lost the track of time and really enjoyed working with the concept development. Someone also described how one becomes very sensitive to all feedback, because the project is so close to you.

*“The concept is not just any school work among others, it has a deeper meaning. Once you have worked so long on something, it is difficult to relate to it without any feelings” (1F10)*

This hard work was most often rewarded with a sense of accomplishment, success, and higher self-confidence. Also, they were not only satisfied with themselves or their group, but they were pleased to our groups’ concepts as well. They felt proud of the whole group that succeeded to finalise the demanding project work. This also resulted in the feeling that the students are better prepared for future working life.

*“I felt our final presentation was a success and I noticed that we had made our style better during the last eight weeks. It felt great to hold a presentation on something that I knew backwards. Other groups surprised me positively and I felt myself proud that all the groups had created such wonderful concepts.” (6F12).*

*“Presenting the concepts to the group regularly and eventually presenting the final concepts to the jury gave more self-confidence. One was used to motivate one’s own concept and argument the choices made in the development process. This will be needed in future working life.” (5F10)*

Self-confidence was not only based on the project outcome, but also the project process had taught students how to develop themselves not only as professionals but also as persons.

*“I have been thinking this for a long time, and eventually in the end of this course I found that confidence inside me, that I don’t need to please the others, if the reality doesn’t give any prerequisites. In group work all should be equal; I don’t want to feel bitter any more after group works. I also learnt about myself that I can push forward and not to give up, even if the other ones do. Because of this course, I found new resources and patience from myself that I didn’t know to exist.” (8F18)*

## **5. Discussion**

The aim of this study was to analyse how marketing students make sense of their professional identity and the construction of it. Professional identity is an example of social identity and a part of self-identity that evolves in social context where people negotiate meanings attached to themselves and to some professions in different contexts. The results show how the development of professional identity is not only dependent on identification with one’s own profession (Ibarra, 1999), but is negotiated together and against other professions as social identification suggests (Deaux, 2001; Hogg, 2006). Also, professional identity evolves in some perspectives already during the study time and is thus seen as a lifelong process. The principles of social identity process describe well the construction of professional identity. The different principles guide the negotiation within identity construction.

As professional identity is linked with career success, it is important for educators to understand how the construction of professional identity can be supported both formally and informally. Indeed, educators should help students to engage with professional identity discussions in order to support the challenges that they will face in planning and managing their future careers. Education programmes can support the development of professional identity in several ways. Based on the results presented in this study, I would like to take up three aspects. First, educators can support continuity in understanding marketing profession as

a future career. This can be done for example by offering visiting lectures and in that way presenting different possible professional identities for students. Also training periods, field visits, or interviewing marketing professionals may give insight into the profession and also open eyes for different opportunities that marketing as profession offers to students.

Second, the curriculums may include multidisciplinary working contexts that support distinction by making students understand how different professionals think and work. Distinction should not be understood as restricting professional identity in some category, but as providing opportunities to discuss why we as marketers work in our way and what we can learn from others. This social negotiation practice allows students to make sense of themselves as marketing professionals and how they relate to other disciplines.


Third, experiential and inquiry based pedagogical approaches can be used to provide self-efficacy by giving students practical knowledge and skills to use their theoretical knowledge in problem-solving. Reflection, feedback, and assessment can be used by students as a mirror to challenge their own learning and to understand how they meet their goals. As in this study, the learning diaries as one reflective method seemed to work well in making student really think what they have learnt and how that supports their future working life within marketing. This may also be used to support students' self-esteem, which is seen as the most important factor in professional identity. However, there should be a balance between requirements and support. Students seem to appreciate learning most when they have found it challenging and passing the course have made them feel proud of themselves as they have achieved something special.

## 6. References

- Akkerman, S.F., & Meijer, P.C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, 27, 308-319.
- Archer, L. (2008). Younger academics' constructions of "authenticity", "success" and professional identity. *Studies in Higher Education*, 33(4), 385-403.
- Beijaard, D. (1995). Teachers' prior experiences and actual perceptions of professional identity. *Teachers and Teaching: Theory and Practice*, 1(2), 281-294.
- Beijaard, D., Meijer, P.C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20, 107-128.
- Beijaard, D., Verloop, N., & Vermunt, J.D. (2000). Teachers' perceptions of professional identity: an explorative study from a personal knowledge perspective. *Teaching and Teacher Education*, 16, 749-764.
- Bennet, R. (2011). What makes a marketer? Development of "marketing professional identity" among marketing graduates during early career experiences. *Journal of Marketing Management*, 27(1-2), 8-27.
- Berry, A., Clemens, A., & Kostogriz, A. (2007). *Dimensions of professional learning: professionalism, practice and identity*. Rotterdam: Sense Publishers.
- Breakwell, G.M. (1986). *Coping with Threatened Identities*. London and New York: Methuen.
- Breakwell, G.M. (1992). Processes of self-evaluation: efficacy and estrangement. In G.M. Breakwell (Ed.), *Social Psychology of Identity and the Self Concept* (pp. 35-55). Surrey: Surrey University Press.
- Breakwell, G.M. (1993). Social representations and social identity. *Papers on Social Representations*, 2(3), 198-217.
- Clarke, C.A., Brown, A.D., & Hailey, V.H. (2009). Working identities? Antagonistic discursive resources and managerial identity. *Human Relations*, 62(3), 323-352.
- Coldron, J., & Smith, R. (1999). Active location in teachers' construction of their professional identities. *Journal of Curriculum Studies*, 31(6), 711-726.
- Connelly, F.M., & Clandinin, D.J. (1999). *Shaping a professional identity: stories of educational practice*. New York: Teachers College Press.
- Cooper, K., & Olson, M.R. (1996). The multiple I's of teacher identity. In M. Kompf, W.R. Bond, D. Dworet & R.T. Boak (Eds.), *Changing Research and Practice: Teachers' Professionalism, Identities and Knowledge* (pp. 78-89). London: Falmer Press.
- Dannels, D.P. (2000). Learning to be professional. Technical classroom discourse, practice, and professional identity construction. *Journal of Business and Technical Communication*, 14(1), 5-32.
- Deaux, K. (2001). Social identity. In J. Worrell (Ed.), *Encyclopedia of Women and Gender, Sex Similarities and Differences and the Impact of Society on Gender* (pp. 1059-1068). Massachusetts: Academic Press.
- Erikson, E.H. (1968). *Identity, Youth and Crisis*. New York: W.W. Norton & Company.
- Gaskell, S., & Leadbetter, J. (2009). Educational psychologists and multi-agency working: Exploring professional identity. *Educational Psychology in Practice*, 25(2), 97-111.

- Gilardi, S., & Lozza, E. (2009). Inquiry-based learning and undergraduates' professional identity development: Assessment of a field research-based course. *Innovative Higher Education, 34*, 245-256.
- Glaser-Secura, D.A., Mudge, S., Bratianu, C., & Dumitru, I. (2010). Development of professional identity in romanian business students. *Education and Training, 52*(3), 198-213.
- Hallier, J., & Summers, J. (2011). Dilemmas and outcomes of professional identity construction among students of human resource management. *Human Resource Management Journal, 21*(2), 204-219.
- Hogg, M.A. (2006). Social identity theory. In P. Burke (Ed.), *Contemporary Social Psychological Theories* (pp. 111-136). Palo Alto: Stanford University Press.
- Ibarra, H. (1999). Provisional selves: experimenting with image and identity in professional adaptation. *Administrative Science Quarterly, 44*, 764-791.
- Miles, M.B., & Huberman, A.M. (1984). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA, Sage.
- Niemi, P.M. (1997). Medical students' professional identity: self-reflection during the preclinical years. *Medical Education, 31*, 408-415.
- Pratt, M.G., Rockmann, K.W., & Kaufman, J.B. (2006). Constructing professional identity: the role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal, 49*(2), 235-262.
- Ryynänen, K. (2001). *Constructing Physician's Professional Identity – Explorations of Students' Critical Experiences in Medical Education*. Academic Dissertation, University of Oulu, Oulu University Press.
- Slay, H.S., & Smith, D.A. (2011). Professional identity construction: using narrative to understand the negotiation of professional and stigmatized cultural identities. *Human Relations, 64*(1), 85-107.
- Stenberg, K. (2011). *Working with Identities Promoting Student Teachers Professional Development*. University of Helsinki, Faculty of Behavioural Sciences, Department of Teacher Education, Helsinki.
- Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education, 26*, 455-365.

# The Challenge of Assessing Creative Problem Solving in Client-Based Marketing Development Projects: A SOLO Taxonomy Approach

Journal of Marketing Education  
35(3) 231–244  
© The Author(s) 2013  
Reprints and permissions:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/0273475313485586  
jmed.sagepub.com  


Minna-Maarit Jaskari<sup>1</sup>

## Abstract

Creativity and marketing imagination are essential core competencies for marketers. Therefore, higher marketing education emphasizes creativity in several ways. However, assessing creativity and creative problem solving is challenging and tools for this purpose have not been developed in the context of marketing education. To address this gap, we analyze the use of Structure of the Observed Learning Outcome (SOLO) taxonomy as an assessment tool in creative problem solving and in doing so develop an assessment framework by contextualizing SOLO taxonomy for client-based marketing development projects. We first introduce earlier literature on assessment and SOLO taxonomy. We then describe a client-based marketing course on creative problem solving. We use SOLO taxonomy to analyze the outcomes and development processes of six student projects and in doing so develop an assessment framework for creative problem solving. Finally, we give suggestions for teachers on how to enhance creative problem solving and its assessment in marketing classrooms.

## Keywords

creative problem solving, assessment, client-based projects, innovative teaching methods, experiential learning techniques

Marketing is a creative process that creates new products and services, develops pricing and channel strategies, and uses branding to enhance the customer relationship. In addition, marketing communications use a wide range of creative solutions. Marketing involves doing things differently, combining old things with new ones, innovating, surprising, and delighting. Indeed, marketing is closely linked to creative thought and imagination (Levitt, 1983). As Titus (2007) emphasizes, Levitt's ideas hold significance for marketers today and "marketing professionals are likely to find themselves under greater pressure to identify and produce new breakthrough products, services or marketing concepts." Thus, creativity and innovativeness are core competencies for marketers.

Creativity is the ability to give birth to something that is both novel (such as original, unexpected, or surprising) and appropriate (useful or adaptive in terms of the task constraints; Stenberg & Lubart, 1999). Within marketing, creativity is defined as a problem-solving process that aims to produce products, services, and marketing initiatives that are unique to the marketplace and create value for the customer (Titus, 2000, 2007). A creative original idea is not enough—for it to have value, the idea must also be useful and

actionable (Amabile, 1998) and implementable (Levitt, 1963/2002). In order to create value in business, creative problem solving needs to combine both creative and critical thinking. Creative thinking is expansive, imaginative, and unconstrained thinking that is associated with exploration and idea generation. Critical thinking in turn is focused, logical, realistic, and practical thinking (Nickerson, 1999). This is why marketing educators need to aim to enhance both the creative and critical thinking skills of their students.

Creative problem solving and the ability to invent new products and customer experiences should also be emphasized in the teaching of marketing (Vogel, Cagan, & Boatwright, 2005). Creativity has already been recognized as an important learning objective and tool in marketing curriculums, and many creative methods are used in marketing education even though there are still concerns about whether marketing faculties formally encourage, recognize, develop,

<sup>1</sup>University of Vaasa, Vaasa, Finland

## Corresponding Author:

Minna-Maarit Jaskari, Department of Marketing, University of Vaasa, PO Box 700, 65101 Vaasa, Finland.  
Email: minna-maarit.jaskari@uwasa.fi

and reward creativity in marketing students (e.g., Lunsford, 1990; McCorkle, Payan, Reardon, & Kling, 2007; Ramocki, 1996; Strauss, 2011; Titus, 2000, 2007). However, no systematic efforts to assess creativity or creative problem solving in a marketing education context have been published to date, even though their importance has been noted (McCorkle et al., 2007).

There are two different facets to assessing creativity: assessing the creativity in students themselves as a personal trait and assessing the creativity of their work (Elton, 2005). In this article, the emphasis is on assessing the creativity of the students' work. However, assessing creativity and creative problem solving is challenging and tools for this purpose have not been developed in the context of marketing education. Especially when teaching creative problem solving in real-life business cases, the assessment practices need to support the fuzzy, complex nature of such cases, where the outcome is uncertain, there are neither specific correct answers nor the possibility of quick closure, and all the answers are context dependent. Thus, assessment practice needs to focus on the relational, contextual, and uncertain aspects leading to open-ended rather than closed answers.

Constructive alignment implies that the intended learning outcomes, teaching and learning activities, and assessment need to be aligned together (Biggs, 1996). It is argued that what and how students learn depends greatly on how they think they will be assessed (Biggs & Tang, 2007). Thus, assessment practices should send the right signals to students about what they should be learning and how they should be learning it. The SOLO (Structure of the Observed Learning Outcome) taxonomy provides one possible framework for evaluating problem-solving cases. It differentiates the different levels of understanding and how they are present in students' solutions (Biggs & Collins, 1982; Biggs & Tang, 2007).

Therefore, we analyze the use of SOLO taxonomy as an assessment tool in creative problem solving and in doing so develop an assessment framework by contextualizing SOLO taxonomy for client-based marketing development projects.

The article proceeds as follows. First, we introduce earlier literature on assessment and SOLO taxonomy. Second, we describe a client-based marketing course on creative problem solving. Third, we use SOLO to analyze six student projects and then develop an assessment framework by contextualizing the SOLO taxonomy for creative problem solving. Finally, we give suggestions for teachers on how to enhance creative problem solving and its assessment in marketing classrooms.

### **Assessing Learning Outcomes**

Assessment is critical to any academic work. Different assessment strategies all aim at finding out the knowledge and skills that the student may or may not have (Jenkins,

2010). The students' learning depends on how they think they are assessed. This is why the assessment criteria need to be communicated openly so that the students focus on the correct aspects in their learning (Biggs & Tang, 2007). Different tools, such as the use of an assessment grid with explicitly specified assessment criteria, are argued to raise the quality of assessment and thus assist students to focus on the most important things (Rust, Price, & O'Donovan, 2003).

Both formative and summative assessments are critically important for education (Taras, 2008). Formative assessment aims to guide and enhance students' learning during the learning process (Brown, Bull, & Pendlebury, 1997). Students are provided with information about the gap between their current knowledge and skills and the desired outcome in order to improve the learning of individual students and to improve the teaching itself (Biggs & Tang, 2007). However, Wingate (2010) notes that formative feedback in learning can only have a positive effect if students actually make use of the feedback to improve their performance. Highly motivated students are ready to do this, but students whose motivation is low may not consider revising their work based on feedback and may even become less motivated if they receive overly critical feedback during their learning. Self-evaluation and peer evaluation are valuable tools that can be incorporated in teaching and learning activities to promote formative assessment. Indeed, formative assessment and feedback should be used to empower students as self-regulated learners (Nicol & Macfarlane-Dick, 2006).

Summative assessment aims at grading the students at the end of a course; it is most often considered the final grade. The aim is to inform students how well they have learned what they were supposed to have learned (Biggs & Tang, 2007). Summative assessment is used to ensure that the student has sufficient knowledge and skills in order to continue his or her studies and later to enter working life; it is thus important for accreditation (Taras, 2008). As formative and summative assessments have different goals, both are needed. It is most important when aiming to ensure that students learn from their mistakes—*noticing and admitting a mistake should not be punished, but rather students should be encouraged to engage in trial-and-error processes and learn from them.* However, making a mistake and learning from it is different from not making any effort at all.

Biggs and Collins (1982) developed the SOLO taxonomy, which describes how the learner's performance grows in complexity when mastering academic tasks. It is a method that encourages higher cognitive outcomes (Leung, 2000). They themselves provide numerous examples on how to apply the SOLO taxonomy in, for example, teaching history, mathematics, English, geography, and modern languages (Biggs & Collins, 1982; Biggs & Tang, 2007). It has also been applied earlier in, for example, measuring the design performance of students of design and technology (Leung,

2000), engineering (Lundberg, 2004), mental health (Chan, Tsui, Chan, & Hong, 2002), and accounting (Lucas & Mladenovic, 2009). However, it has not been applied in assessing creativity and creative problem solving, even though creativity has been considered important (Biggs & Tang, 2007; Elton, 2005).

Biggs and Collins (1982) distinguish five levels of understanding, each of which is characterized by capacity, relating operation, consistency, and closure. *Capacity* refers to the amount of working memory or attention span required at different levels. One needs to think more and about several aspects at the same time in order to reach higher levels of understanding. *Relating operation* refers to the way in which the problem and the solution interrelate. At the lower levels, there is no logical interrelation; instead, there may be denial or tautology, where the student clearly misses the point. Higher levels correctly draw a general conclusion from particular instances using either one or several cues. The highest levels introduce new abstract principles not given in the problem.

*Consistency and closure* refer to two opposing needs of the learner: one is the need to come to a conclusion and the other is to make consistent conclusions so that there are no contradictions in logical argumentation. The greater the learner's need to come to quick closure, the lesser he or she will use the data. A quick closure usually leads to a higher probability that the outcome is inconsistent with the original data. Lower levels of understanding are often high in quick closure and low in consistency, whereas higher levels emphasize consistency and may even require closure to be left open (fuzzy, complex situations). These all affect how the student can structure the answer and show an understanding of a given matter. The five levels of understanding are prestructural, unistructural, multistructural, relational, and extended abstract (Biggs & Collins, 1982).

At the *prestructural* level, the student has not done the task properly or has not understood the point. The capacity used is minimal, and the problem and response may be confused. The answer has no logical relationship to the problem because of an inability to comprehend, tautology, or idiosyncratic relevance. The student may reach closure without understanding the problem. For example, a student may produce a quick answer based on his or her earlier experiences without understanding the context of the problem. At prestructural level, the student cannot be given a passing grade on the assignment (Biggs & Collins, 1982; Leung, 2000; Lucas & Mladenovic, 2009; Lundberg, 2004).

At the *unistructural* level, the student picks up on and uses one or a few aspects of the task, and thus his or her understanding is nominal. The student can make generalizations based on one aspect or experience. He or she reaches a quick closure that oversimplifies the issue; the student might jump to conclusions and be inconsistent in his or her answer. For example, the student may rely on one or few shallow

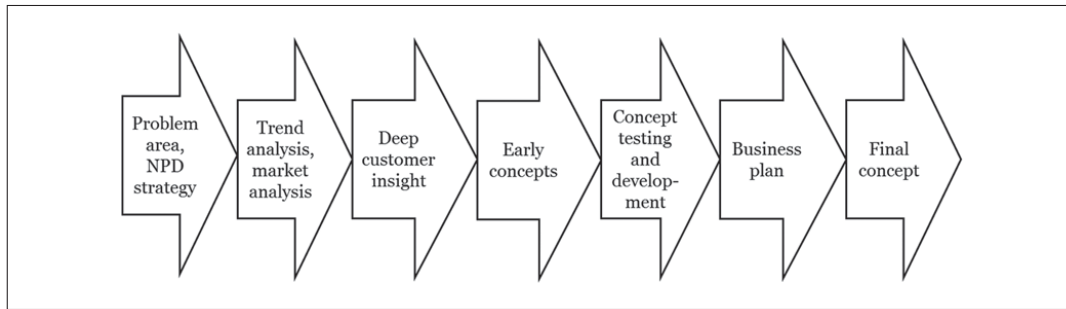
customer interviews without understanding the differences between different customer groups (Biggs & Collins, 1982; Leung, 2000; Lucas & Mladenovic, 2009; Lundberg, 2004).

At the *multistructural* level, the student has learned several aspects of the task; however, he or she treats these aspects separately and can make generalizations based on these independent aspects. Understanding involves knowing about different things; the student may describe and list them, but may not be able to relate them to each other. There begins to be a feel of consistency, but closure is selective and immature. For example, the student may list several ideas for new services, but treats them independently, does not link them, and cannot construct a coherent concept out of them (Biggs & Collins, 1982; Leung, 2000; Lucas & Mladenovic, 2009; Lundberg, 2004).

At the *relational* level, the student integrates the different aspects into a coherent whole, where each part contributes to the overall meaning. The student identifies and uses most or all of the relevant data, and resolves conflicts using a relating concept that applies to the given context. This integration leads to a firm conclusion that applies in a given context; however, inconsistencies may occur outside the context. For example, the student reaches the level of a coherent whole and is able to form a holistic marketing concept where different elements add value to the concept (Biggs & Collins, 1982; Leung, 2000; Lucas & Mladenovic, 2009; Lundberg, 2004).

At the *extended abstract* level, the student reconceptualizes the integrated whole at the relational level and at a higher level of abstraction. The reconceptualization enables generalization to a new topic or area, or turning it reflexively on oneself. Understanding is seen as involving metacognition, thinking about thinking. The student may question basic assumptions, present counterexamples, and provide new data that did not form part of the original problem that was posed. A firm closure is often seen to be inappropriate, and conclusions are held open or qualified to allow logically possible alternatives. For example, the student can integrate new original, unexpected, or surprising elements such as technological innovations into the integrated whole or provide different concepts for different strategic goals (Biggs & Collins, 1982; Leung, 2000; Lucas & Mladenovic, 2009; Lundberg, 2004).

Assessment of problem-solving activity varies depending on the level and challenge of the problems. On the one end, there are specific or standard questions that can be solved by using conventional paradigms, thus calling for relational answers. However, even then, an extended abstract response may be reached by originality and conciseness (Biggs & Tang, 2007). On the other end, there are fuzzy and complex problems that have no definite correct answers, only better or worse ones. In such cases the quality of the answer is dependent on the context and the teacher has to decide on assessment criteria, such as degree of originality, "elegance," or holistic understanding of value for different parties. This is the case in assessing creativity (Biggs & Tang, 2007).



**Figure 1.** The general development process for students to follow.

The practical outcomes of creative problem solving in marketing are also context-dependent and relational. Indeed, professional knowledge in marketing is complex, unstable, unique, and includes possible value conflicts (Schön, 1983). The characteristics of marketing knowledge set requirements for the teaching of practical marketing. Teachers should aim at enabling students to reach the extended abstract level in their studies. Originality and uniqueness are important aspects of assessing creativity. The outcome must also be applicable and appropriate so that it can provide value (Biggs & Tang, 2007). Furthermore, in our client-based marketing development projects, we enhance creative problem solving throughout the course. Thus, the assessment should not only concentrate on the final outcome or outcomes but also on the process of how the outcome has been reached.

### **Enabling Creative Problem Solving: A Description of the Case Course**

The context for this article is a master's level course called "Concept Factory" in marketing at a business university of Vaasa in Finland. The marketing students attending the course are in their first year out of two. They have a bachelor's degree before entering the master's program. The learning focuses on creative problem solving in client-based marketing projects. The teaching in the course is based on experiential learning (Kolb, 1984) that emphasizes constructive teaching leading to deep learning in real-life contexts. During the past 6 years (2007-2012) the course has been run seven times, three times with marketing students and four times with cross-functional teams, first with designers and then with communication students. Twice, the course has also involved international collaboration with Umeå Institute of Design in Sweden.

The course runs for a fall semester. The students work intensively for 4 months. They meet approximately once a week in a class to discuss the projects with the instructor and with each other. Altogether they meet 11 times. Students are

divided into teams and given real-life development challenges, such as brand building, product development, or service innovation. During the class time, the instructors organize workshops on different topics, such as innovative ways to gather customer information or how to analyze qualitative customer data. The student groups present their progress and the challenges facing their process, and then discuss these issues with the class. Drawing on the teacher's background in business, the constructive method imitates the normal practices of business life more than traditional teaching by lecturing.

The development process has varied slightly over the years as the students have followed business planning, innovation, design, or integrated marketing communication processes depending on the client projects and real-life contexts. However, the students have had a systematic process to follow each year in order to diminish complexity and fuzziness. This process provides guidelines for critical, business-oriented thinking, but leaves freedom for creative thinking in different phases. Figure 1 presents an example of the different phases of a development process. For the project work the students are credited with 10 study points.

### **Engaging Students in Creative Processes**

In earlier courses of "Concept Factory," creativity merely involved implicit expectations whereas later courses have emphasized creativity by teaching creative methods and bringing in designers or other professionals to challenge the students' thinking processes. Over the years, creativity has been taken up more explicitly and promoted in every phase of the development process. For example, students have been encouraged to use different ideation methods, engage in user observation, use innovative research techniques to gain customer insight, run customer workshops, develop customer profiles, conduct professional interviews, transfer ideas from one industry to another, carry out benchmarking, use multiple ways to test and evaluate their first concepts, and use pictures and other visual storytelling aids.



A creative thinking process involves task motivation, disciplinary knowledge, cognitive flexibility, and serendipity, all of which involve uncertainty (Titus, 2007). Many individuals are not motivated enough to tackle creative problems, as it takes a lot of time, energy, and effort. In short, it requires persistence and *task motivation* (Collins & Amabile, 1999; Lehrer, 2012; Titus, 2007). The absence of motivation can lead individuals to give up on their creative efforts and fail to come up with valuable creative outputs. Motivation can be either intrinsic or extrinsic. Intrinsic motivation means engaging with a case primarily for its own sake, because the student finds it interesting, exciting, and personally challenging. Extrinsic motivation in turn involves a situation where students work on a task to earn some reward, for example, study points and high grades (Collins & Amabile, 1999).

In our course, we try to affect the extrinsic motivation directly by choosing interesting and challenging real-life cases, by showing the process of creative problem solving, and by explaining what to do in order to pass with different grades. We try to affect intrinsic motivation indirectly (Collins & Amabile, 1999), as from experience we have noticed that students often find intrinsic motivation after digging into real-life cases and getting customer insight. At that point they seem to gain ownership of the project and knowledge, and the ownership seems to have a positive effect on their intrinsic motivation. Indeed, Stenberg and Lubart (1999) note that creativity does not only require motivation but may also generate it.

Individuals operating in a particular industry, discipline, or area of expertise gain a significant amount of explicit, implicit, and tacit knowledge over time. It is believed that heightened levels of *disciplinary knowledge* increase the likelihood of producing creative breakthroughs (Titus, 2007). However, it is argued that the biggest problems we need to solve require the expertise of people from different disciplines (Lehrer, 2012). In our course, we enhance disciplinary knowledge in two ways. First, there is business and marketing knowledge that is partly gained through earlier studies. Second, there is case knowledge, that is, knowledge about the industry in which the development project is being carried out. We enhance the contextual understanding by bringing in professionals from the industry and by coaching the students to use different tools to analyze the case and interview industry professionals.

Individuals who consistently use alternative approaches or pathways to solve difficult problems are said to be *cognitively flexible* in their thinking (Titus, 2007). In other words, they can think outside the box. The opposite of cognitive flexibility is functional fixedness, which means the inability to break free from conventional problem-solving pathways (German & Barrett, 2005). We enhance cognitive flexibility by means such as introducing creative methods and problem-solving methods, helping students combine ideas from different contexts, and assembling cross-functional or culturally

diverse teams. We encourage the transfer of knowledge gained from different contexts such as hobbies, part-time jobs, or traveling to the task at hand.

*Serendipity* refers to the fact that creative success is difficult to plan. In fact, many scientific discoveries, such as penicillin, Viagra, or the microwave oven have seemingly occurred by accident (Titus, 2007). Even though we cannot plan a lucky coincidence, we discuss the role of serendipity in different cases and make this facet more explicit for the students.

The most important aspect of a creative process is that it occurs within an environment of *uncertainty*. Hence, there are no guarantees that any given process will produce a creative solution or marketing breakthrough (Titus, 2007). In fact, there are barriers to expressing creativity such as fear of failure, fear of doing something different, and fear of taking risks (Anderson, 2006). The students might find it difficult and challenging to bear the uncertainty, as many of them want to make safe decisions in order to pass the course with good or satisfactory marks. Jumping into unknown territory, going to the wild side by letting go of the usual and safe, requires courage and boldness. The spontaneous "letting go" can not only be very frightening but also be an extremely valuable source of creativity (Lehrer, 2012, p. 89). Moreover, the school represents a difficult context for teachers to convince students to spend time and energy to tackle difficult marketing problems without the certainty of reaching a creative and valuable solution (Titus, 2007).

We try to make it easier for students to tolerate uncertainty by planning the development process so that it is less fuzzy and more systematic, creating an atmosphere where students feel secure in expressing their ideas and letting themselves engage in trial-and-error processes, by openly discussing the feeling of uncertainty, and by motivating the students to challenge themselves. For the students, it is valuable to see that other students or student groups are tackling similar kinds of problems. We enhance the knowledge sharing by organizing meetings, discussions, and presentation possibilities for the students.

Table 1 describes the course outline and timetable from the fall of 2012. Next, we will turn to the assessment of creative problem solving in learning outcomes.

### Analyzing Creative Problem Solving in the Student Teamwork

The data for the study consist of a client-based project that was run in the fall semester. The client for the course was an open-air museum called Stundars in the countryside of western Finland. The museum wanted to attract more families with children to visit their grounds not only once but several times during the summer. The students received a two-page brief explaining the current situation of the museum, the objective of the student work, and resource constraints. Thus,

**Table 1.** An Example of the Course Outline and Timetable (Fall Semester 2012).

Number of week/ day/time	Teacher prepares/lectures/workshops	Student activity	Student assignment outside class time
	Negotiate with the case organization and plan the course content, outline, methods, and activities Write a syllabus Write a business-like project brief for the students Prepare self-test materials for the students		
Week 38/ Tuesday/9-12 (3 hours)	Break the ice—this course is different! Present the introduction to the course	Introduction to the course and working methods, individual learning style test, social communication test, setting the teams, team-building activities	Find background information about the client organization. Prepare questions for the client
	Give individual essay topics to the students (survey, observation, (n)ethnography, interview, visual aids and collages, and focus groups)	Introduction to the client organization, project brief	Start preparing your individual essay on one method of customer inquiry
Week 39/ Tuesday/9-12	Introduction to methods to enrich problem formulation (mind map, what if . . . , 5W + H), tools for project planning (e.g., Michanek & Breiler, 2009; Tassoul, 2009)	Visiting the case organization	Finalize the preliminary project plan and submit by Friday. You will receive feedback next Tuesday
		Presentation from the client and interviews	Prepare your individual essay on one method of customer inquiry
		Problem-setting exercises How to write a project plan?	
Week 40/ Tuesday/9-12	Check the project goals and how they fit the project brief. Negotiate with the students and client if necessary	Workshop—gaining customer insight	Discuss with your group what you learned about different methods of gaining customer insight. How would you gain insight for your project? Decide and write a research plan, present it next time. Start digging! (You can always get feedback and guidance by visiting the teacher/s.)
	Vote for the best poster—have a small present (candy) for the winning group	Prepare a poster about your essay topic with others Present a poster with the walkabout method Feedback	
Book a time	Give feedback about the project plans to each group		
Week 41/ Tuesday/9-12	Feedback on research plans and analyzing methods	Present your plan to gain customer insight!	Continue working on gaining customer insight—prepare a presentation for the next time
	Serve coffee to everyone to make the guest lecture more special	How to become a convincing presenter! —A special guest lecture!	
Week 42/ Tuesday/9-14 (5 hours)	With each group, guide discussion about what has been found out, the validity and reliability of the information, and how all the groups can benefit from each other! Try to create an atmosphere that encourages knowledge sharing, not competition between groups Presentation about the use of customer profiles	Knowledge sharing! Present your customer research!  Customer profiling workshop. Presentation about customer profiles in product development and how to prepare them	

*(continued)*

Table 1. (continued)

Number of week/ day/time	Teacher prepares/lectures/workshops	Student activity	Student assignment outside class time
	Introduce several ideation methods and practice them (me–we–us, dreaming, brainstorming, negative brainstorming, using imaginary places, situations or roles, challenging the self-evident, random word technique, using pictorial cards in ideation; e.g., Michanek & Breiler, 2009; Tassoul, 2009)	From scattered information to holistic concepts—ideation methods and customer-centered concept development	
Week 43		Exam week, no class. Voluntary guidance sessions	Continue working on ideation methods and concept development
Week 44/ Tuesday/9-12	Give feedback on each concept. Encourage critical thinking by questioning. Avoid direct suggestions	Present three strong concepts	Familiarize yourself with idea evaluation methods and choose how you will evaluate your three concepts. Evaluate them and modify if needed
	Present idea evaluation methods (3i—influence, importance & imaginative, six thinking hats, SWOT, point). (e.g., Michanek & Breiler, 2009; Tassoul, 2009)	Idea evaluation methods	Work on the creative communication plan for your concepts (what you want to say, how you will say it) Look through the syllabus again and check all the things you need to do before the end of the course. Reschedule your project plan, if necessary
Week 45/ Tuesday/9-12	Discuss concept testing	Present preliminary creative plans for your concepts, explain and motivate your visual choices	Plan and test your concepts. Modify, combine, and develop the final concept
Week 46/ Tuesday/9-12	By now the groups are getting tired—motivate and encourage them to push till the end	Present your test results. Get feedback from your peers. Be prepared to modify your work!	Work with action and media plan + budget
Week 47/ Tuesday/9-12		Present your action plan, media plan, and budget	Work on your final presentation. What makes your group stand out in the class?
Week 48/ Tuesday/9-12		Extra time. Final presentation rehearsal on Friday or next week Monday	Send a teaser about your concept to the members of the jury
Week 49/ Tuesday/9-12	Prepare the jury beforehand  Create an exciting but motivating atmosphere. Have a present for the winning team Serve coffee to make the session more business-like and special	“Dancing with the Stars”—final show Enjoy!	
Week 50			Write an evaluation about the project work with your group. Be critical! Finalize the final client report. Hand it in by the end of Week 50
Week 51			Hand in the individual learning diaries
Week 52 Weeks 1-2	Read and assess the assignments (final report and all the presentations). Write a review for each student group. Wish them well Collect feedback and develop the course further		

the starting point for all the groups was the same. The course followed the outline presented earlier. The students came up with six distinct final concepts that they both presented orally and reported in writing.

Altogether 25 students participated in the course, of whom 14 were marketing students and 11 communication and language students. There were six cross-functional teams and thus six final reports. The students presented their work several times during the course. The teacher took notes during the presentations and provided feedback to the teams. These notes together with the presentation material serve as data along with the final reports. Furthermore, each student wrote an individual learning diary during the course in order to develop their metacognitive and learning-to-learn skills. The final assessment was based 20% on the outcome, 60% on the process, and 20% on the communication skills and presentation. The learning diaries were assessed and credited for two study points separately.

These six student projects were analyzed in terms of their creative outcome and process. Our interest focuses on what kinds of creative solutions the students came up with and how they reached those outcomes. Thus, our interest lies in both the outcome and the process. The unit of analysis is a teamwork-based group assignment; thus, we do not analyze individual students. The usefulness of the outcome for the client was evaluated by the client. However, we used the individual learning diaries to understand the process of development work.

The outcome was analyzed in terms of its novelty to the market and the targeted customer group (high, medium, low), usefulness to the client (high, medium, low), and the structure of the concept (SOLO levels, the simplicity or complexity of the presented solution, and how well the solution fit the problem). The development process was analyzed by using the elements of the SOLO taxonomy, namely capacity (how much time and energy was used for the solution, both thinking and doing, creative and critical), relating operation (how well the students acquired new data and used them in constructing their solution), and consistency and closure (how the group dealt with inconsistencies and uncertainty and whether they took their time or aimed to close quickly). To demonstrate the analysis, a detailed description of two final concepts and the evaluation of the outcome and development processes are presented in Table 2. Table 3 summarizes the evaluation of the all six different concepts.

All the student teams came up with case solutions that either provided novelty or were useful for the client. The levels of novelty were not very high; the teams mostly reached a medium level of novelty while still providing value for the client. It seems to be difficult to balance between high novelty, high usefulness, and a holistic concept. The team that clearly strived for high novelty lacked contextual understanding. The teams that strived for high usefulness for the client had to compromise in order to account for the

expectation of high novelty. However, we do not think that the students should be punished for striving for usefulness and medium level of novelty. If they understand the contextual demands and can provide novel ideas in a holistic manner, they have reached the relational level of understanding. Those who can combine all have clearly reached the level of extended abstract understanding.

Most student teams reached the multistructural or relational levels. The project brief suggested that the students should work toward an integrated marketing concept with practical phases such as action plans and budgets. Thus, it guided the students to aim for closure and maybe even neglect the extended abstract level. Indeed, the teacher needs to be careful on how to formulate the problem at the beginning of the course. The multistructural and relational levels also serve as a watershed between different solutions. At the multistructural level, the students have not yet reached a holistic understanding of their construct, but on the relational level they have. Indeed, it seems clear that we should aim for the relational level.

The extended abstract level requires the students to question parts of the project brief or to clearly take up a challenge that has not been asked directly. Reaching out for the extended abstract level requires a great deal of courage from the students. In order to push the students further to reach the extended abstract level, the project brief and the problem could be left more open, thereby giving students more latitude. However, the project might then lose something else, such as practical marketing math. Indeed, the teacher needs to balance between these matters.

None of the cases exemplify the prestructural level, either in terms of the outcome or the process. None of the student groups lacked motivation to complete the task. All of them put their mind to the development process and produced real solutions for the client's problem. Also, all the groups were active and completed the tasks required. However, their performance level during task completion and how well they were able to use that information in the development process differed between the teams.

The evaluation of capacity is difficult if it is restricted only to working memory, inside the student's head. Students work hard not only in the classroom but outside it as well. The teacher needs to assess what she or he sees and the use of capacity should be evaluated through different tasks in terms of what the students have done and how well. Also, the teacher can sense how far the students have gone out of their comfort zone to work and think in an area of uncertainty. That is why it is suggested that the assessment framework should combine capacity with task motivation.

The level of the process was not constant throughout the project. Indeed, there were differences between different phases and different teams. There were phases in which the groups worked harder and some in which their motivation faltered. Some teams worked really hard at the beginning

Table 2. Description and Evaluation of the Two Exemplary Cases.

Name of the concept	Description of the final concept	Evaluation of the outcome	Evaluation of the process
<b>Concept 1.</b> <b>“Genuine life”</b>	<i>The final concept integrates several new activities and services in the area. The concept is built on three ideas: being natural, close, and easy to access. It includes both activities targeted at the expected target group and new activities to attract new potential target groups that would generate substantially more income for the museum. The final concept enables wide cooperation between different actors in the region and thus provides potential value for many different parties.</i>	<p>The structure of the outcome is a coherent, integrated whole that provides novelty, usefulness, and value for several parties, namely the client, potential customers, and other service providers in the area, such as farmers. The concept has unexpected potential to generate new business opportunities. The outcome was clearly developed from the students' own ideas, which they honed on the basis of feedback from the teachers.</p>	<p>In the development process, the team worked eagerly and was motivated to finish the project in an exemplary manner. The development process was explorative, deep, rich, and holistic. The process included sourcing customer data from multiple sources and using that data as bases of idea generation and evaluation. For example, the students designed a little pig mascot that the museum can use both in its marketing and on its premises. The group was brave and able to “let go” in the creative process, welcoming new ideas, testing different ideas, and working hard toward a coherent marketing concept. At the same time they were able to tackle inconsistencies and aim for coherent closure. In their final presentation they suggested one concept that fit the resource limitations given by the client, but left some options open so that a different option can be implemented if the client is interested in further developing the concept. Their use of capacity was very high and the process showed evidence of trial and error, where students both kept their minds open to new ideas but at the same time tried to make sense of the new data and the client's expectations. This case represents the extended abstract level of the creative problem-solving process.</p>
<b>Concept 6.</b> <b>“TimeAdventure!”</b>	<i>TimeAdventure! is a concept that combines a new cafeteria and internet-based game for little visitors. The player travels through time and learns how things were done in the past. Afterward the children can dress up in costumes like the ones in the game and walk through the museum area. While the children play the game, the parents can relax and enjoy coffee and special local delicacies. The main focus is to relax, to have a break in the cafeteria.</i>	<p>The idea of combining a larger new cafe and Internet play area is modern but unrealistic for the open-air museum. However, the student group successfully implemented business thinking in a museum context. Unfortunately, their ideas are not well tested, but rely mostly on their own evaluation. The level of novelty is low in the case of both the cafe and the game (the museum already has one on its website). However, the group did well in combining these with the idea of getting children to play outside the cafeteria as well. The structure of the outcome is multistructural. The students combined different independent aspects but were not able to form a coherent whole out of them.</p>	<p>In the development process, the team was able to complete all the assignments. However, their task motivation and capacity were low. The teachers had several discussions with the group to clarify the level of intended learning. Their customer insight was at a shallow level, as they conducted only two interviews. The team used only some tools for creative thinking and few evaluation methods. Their strength was one creative student who was able to present ideas and advertisements that fit the concept, even though the concept itself was not very well structured. The team had a few ideas at the beginning but the students did not put themselves through the creative and critical thinking processes. The process faced difficulties in the data-gathering phases and after that the group had difficulties in focusing on problem solving. The team worked on one idea for a long time and clearly aimed for a quick closure. Eventually they were able to build a concept, but its premises were not well grounded. Their final presentation surprised everyone as it was mostly a well-done video presentation.</p>

**Table 3.** Analyzing Creativity in Client-Based Marketing Development Projects.

	Outcome and structure	Capacity and task motivation	Relating operation	Consistency and closure	Assessment (Structure of the Observed Learning Outcomes, SOLO)
Case 1: Genuine life	Novelty: medium  Usefulness: very high Structure: coherent whole with unexpected enlargements	Very high	High amount of new data collected for use in problem solving. Able to bring new insights. Able to use them in problem solving.	Unhurried closure, worked with different options and inconsistencies.	Extended abstract
Case 2: For the whole family!	Novelty: low  Usefulness: high Structure: coherent whole, neat package	High	High amount of new data acquired and used in problem solving. Medium amount used in a solution.	Aimed for closure but worked until they found a coherent whole with a clear core idea.	Relational
Case 3: A moment to myself	Novelty: medium  Usefulness: medium Structure: coherent whole, neat package	Very high	High amount of new data collected for use in problem solving. Medium amount used in problem solving.	Unhurried closure, worked with different options and inconsistencies.	Relational/extended abstract
Case 4: Our [name]	Novelty: medium  Usefulness: medium Structure: coherent whole	High	Medium amount of new data acquired.	Aimed for closure but worked until they found a coherent whole with a clear core idea.	Relational
Case 5: Book your own puzzle!	Novelty: very high  Usefulness: low Structure: multistructural	Medium-Low	Low amount of new data acquired.	Aimed for quick closure but worked with inconsistencies.	Unistructural/ multistructural
Case 6: TimeAdventure!	Novelty: low  Usefulness: low Structure: multistructural	Low	Really low amount of new data acquired. Used in problem solving, few cues.	Aimed for quick closure, difficulties with working with inconsistencies.	Unistructural/ multistructural

and served as examples for the rest of the teams. Their example built up social pressure for the others in a positive manner. Some became tired and demotivated and did not do well in some parts, but were able to pull it all together in the end. In our case, the project ran for quite a long time, 4 months, and all the students attended other courses at the same time. Sometimes, teamwork challenges also affected the level of working. Thus, the level of the process might not remain the

same during the whole process and there can be imbalance between the phases.

Also, earlier it has been noticed that determining the actual level can be difficult, as it may be somewhere in between the defined levels. Biggs and Collins (1982) identify transformational in-between levels and Chan et al. (2002) include several sublevels, increasing the number of levels to eight. However, we suggest that trying to assess

**Table 4.** An Assessment Framework for Assessing Creative Problem Solving in Client-Based Marketing Development Projects.

Level of understanding	Outcome	Process		
		Capacity	Relating operation	Consistency and closure
Extended abstract	Innovative, even surprising outcome that generates value for different parties and even adds new novel elements. The structure of the solution builds on a coherent holistic whole.	An integrated and holistic process where the students use creative methods, tools, and techniques in different phases. They show boldness by working in an area of uncertainty, out of their comfort zone.	Several ideas combined, even more abstract aspects combined into the solution.	Unhurried closure, working with inconsistencies, and keeping several options open at an abstract level. Relating options to each other and presenting one of them as only one possible solution.
Relational	A coherent and holistic solution, where different aspects are in balance with each other. The ideas are novel and context-specific. They create value for the market and are useful and applicable for the client.	A clear process in which many new ideas are evaluated and tested. Creative thinking and explicit methods are used in several phases of the process and the choice of methods is contextual. Pushing the limit, working in uncertainty.	The students are able to combine several ideas into a more abstract whole in different phases of the process.	Unhurried closure, working with inconsistencies, and keeping several options open at a practical level. Working in uncertainty. Presents coherent closure.
Multistructural	A solution that includes several novel, useful, and valuable factors, but does not achieve a coherent holistic whole. Some aspects may not fit the whole.	The process is based on few ideas, but the creative techniques are not used to gather ideas or the choices are not motivated or there are no clear criteria for choosing ideas. The ideation phase or visual presentation may be emphasized over critical evaluation.	The students have several ideas that are contextually relevant, but do not connect them to each other. In some cases, there might be a lack of focus or a core idea that would help to conceptualize the whole.	Aiming for unhurried closure, working with inconsistencies, finding it hard to work in a state of uncertainty. Closes before reaching a coherent whole.
Unistructural	A solution that includes some novel, useful, and valuable factors. Based on one or few ideas, lacking relativity and context dependency.	Weak capacity and task motivation. May be based on one idea that has been obtained from the customer or expert. Much of the time, the students seek to find support for their own idea rather than critically reviewing it. Students do not leave their comfort zone.	Students rely on one or few ideas that may not be contextualized for the client.	Aiming for quick closure, difficulties in working with inconsistencies and bearing the uncertainty.
Prestructural	A solution that has no real novel or useful ideas or which does not fit the market or client's context.	No real capacity used in the process. Lack of task motivation. No creative techniques used, no boldness to leave the comfort zone.	No cues outside customer brief.	Quick closure.

several phases through several aspects at several levels may result in an overly complicated assessment framework. In the end, the teacher should also strive for a concise assessment that both develops students as individuals and treats them fairly.

Table 4 presents the framework for assessing creative problem solving in client-based projects. It is based on assessing both the outcome and the process. The outcome emphasizes the novelty, usefulness, and the coherence (structure) of the solution. The process emphasizes students'

capacity and task motivation, the use of relating operations, and students' need to aim for consistency and closure.

### **Discussion: Enhancing Creative Problem Solving and Its Assessment**

Higher education generally should develop knowledge that is organized structurally at the relational or extended abstract level. These levels mean not only knowing different concepts or facts but also understanding their relationships and contextual constraints. Applying marketing knowledge requires an understanding of several factors at the same time while still being able to solve problems. Thus, marketing education also needs to aim at the relational and extended abstract levels of understanding.

In a marketing classroom, we rarely see real-world marketing breakthroughs (Titus, 2007) or Creativity with "a capital C." However, for marketers, creativity with a "lower-case c" may be just as important. Creativity in marketing is an ability to think differently and to combine creative unconstrained thinking with analytical, business-oriented critical thinking. It is an ability to understand holistic concepts and how to create value both to the customers and to the company. Sometimes the deep understanding of customer feelings and fantasies can produce minor changes to the current marketing and still result in market success.

Teaching and assessment of creativity and creative problem solving should focus on not only the outcome but the whole process. For the students it is an extremely valuable experience to feel that they are in a state of uncertainty but are still able to accomplish a solid solution by working hard. Indeed, successful experiences build confidence (Nickerson, 1999). However, some students need rules and examples, encouragement, and motivation to be able to push through the uncertainty of not knowing what to do next. Thus, the course structure should both give a structure for the development process and leave freedom for the students (see also, e.g., Nickerson, 1999). The example we have given in this article balances between logical and analytical critical thinking (a path to follow) and unconstrained creative thinking (creative methods and freedom within phases).

Many of the business courses at our university are based on lectures, discussion, exams, and/or group work. They aim at developing the students' knowledge and analytical thinking skills. Attending a course that involves creative problem solving is simultaneously inspiring and frightening for many students. Many of them do not know how to start working. When the students are introduced to tools for creative thinking in different phases of the development projects, they are more eager to use them. Creative tools may be introduced in several ways, such as teaching some of them, asking the students to dig into some of them, bringing in professionals from creative fields, or structuring the course around multi-functional and/or international teams. We have introduced

such creative tools in the problem formulation, customer insight, idea generation, and evaluation phases (see Table 1). The students become familiar with the way that this course is taught and by the end of the course they harness their own creativity by making advertisements and professional final presentations.

The background development process is used to assess the student work in different phases. The teacher needs to decide on the background process and how open or closed it is. The process may be different in different client projects, depending on whether the challenge involves, for example, business development, concept development, brand building, or event marketing. In our case we used a process for concept development and structured the course based on that process. It gave structure for the students while leaving room for creativity. A less organized process provides even more latitude, while a more organized process gives more structure. The background process and the course structure also help the teacher provide formative feedback for the students and thus help them in reaching higher levels of the taxonomy. The process also helps the teacher to conclude the summative feedback.

The assessment framework developed and contextualized in this article aims to make assessment easier for the teacher and more open and understandable for the students. In this way the students understand where they should focus the most effort. The assessment framework and its use should be discussed with the students to make sure the students understand the criteria (Rust et al., 2003). The assessment of creativity is often just one part of assessment; other aspects must be assessed as well, such as teamwork skills, communication skills, and critical reflection of own learning.

Assessment is a challenging task. It is subjective in nature, which poses many challenges. For example, there are cases where the teacher likes a certain group and its work and really wants to give these students a good grade, even if they cannot reach the relational level. On the other hand, one of the groups might be arrogant—although the students in the group produce great work, they get on the teacher's nerves by questioning him or her and working in unexpected ways. The teacher needs to learn to tolerate the unforeseen and let the students follow their own creative paths. Also, the use of an assessment framework may lighten the burden and help the teacher to maintain objectivity.

### **Limitations, Future Research Directions, and Conclusions**

While developing the assessment framework, we have emphasized the teamwork of the students, that is, group creativity. We have not taken into account the differences in creativity between people, creativity as a personal trait, nor have we aimed to assess individual creativity. However, from the analysis, it can be seen how students with more creative



personalities can make a great contribution to the teamwork. This difference opens a new path for future research—the study of the role of individual creativity within group work.

Also, we have looked into the SOLO taxonomy from a master's level creative problem-solving activity point of view, where the aim has been to develop coherent marketing concepts in a client-based project. However, the SOLO taxonomy can be contextualized to different marketing topics. Indeed, the different levels of understanding can be seen in the bachelor's level as well. Also, marketing educators can find the framework useful to be applied in different teaching methods such as case method.

Creativity and creative problem solving are the seeds for business and thus need to be taught in marketing curriculums. Also, creative problem solving needs to be assessed because the assessment practices signal to the students what they need to learn. The constructive alignment of teaching is also strengthened. However, assessing creativity and creative problem solving is a challenging task, and there have been no assessment frameworks that have been contextualized for creative problem solving in marketing education.

We have analyzed and contextualized SOLO taxonomy for assessing creative problem solving in client-based marketing development projects. We have combined both creative unconstrained thinking with business-oriented critical thinking in different phases of development projects. When planning for marketing courses we should aim at relational and extended abstract levels of understanding. The assessment framework provides a tool for teachers to plan and structure courses, to openly discuss the assessment criteria with the students, and to assess the learning.

When assessing creative problem solving, it is not enough to assess the outcome of the project but also the process, that is, how the students have reached the outcome. Even though in real life, after graduation, the outcome itself may be the most important goal, for learning purposes the process, the route map, becomes very important. The process can be enhanced to spur students to reach new heights in creativity. The process is where the teacher sees how the students' creative and critical thinking have evolved and how they have reached their conclusions. Thus, the assessment framework includes both the outcome and the process.

Teaching creative problem solving in marketing is challenging—but at the same time inspiring and fun. Young students may have the craziest ideas that challenge the client organizations' thinking. By letting these ideas flower, we can both challenge the old way of thinking and aim at new ways to innovate.

#### Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Funding

The author received no financial support for the research, authorship, and/or publication of this article.

#### References

- Amabile, T. (1998). How to kill creativity. *Harvard Business Review*, September-October, 77-87.
- Anderson, L. (2006). Building confidence in creativity: MBA students. *Marketing Education Review*, 16(1), 91-96.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32, 347-364.
- Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university* (3rd ed.). Berkshire, England: Society for Research in Higher Education and Open University Press.
- Biggs, J. B., & Collins, K. F. (1982). *Evaluating the quality of learning: The SOLO taxonomy*. New York, NY: Academic Press.
- Brown, G., Bull, J., & Pendlebury, M. (1997). *Assessing student learning in higher education*. London, England: Routledge.
- Chan, C. C., Tsui, M. S., & Hong, J. H. (2002). Applying the Structure of the Observed Learning Outcomes (SOLO) taxonomy on student's learning outcomes: An empirical study. *Assessment & Evaluation in Higher Education*, 27, 511-527.
- Collins, M. A., & Amabile, T. M. (1999). Motivation and creativity. In R. J. Stenberg (Ed.), *Handbook of creativity* (pp. 297-312). New York, NY: Cambridge University Press.
- Elton, L. (2005). *Designing assessment for creativity: An imaginative curriculum guide*. Retrieved from <http://www.heacademy.ac.uk>
- German, T. P., & Barrett, H. C. (2005). Functional fixedness in a technologically sparse culture. *Psychological Science*, 16, 1-5.
- Jenkins, J. O. (2010). A multi-faceted formative assessment approach: Better recognising the learning needs of students. *Assessment & Evaluation in Higher Education*, 35, 565-576.
- Kolb, D. A. (1984). *Experiential learning: Experience as a source of learning and development*. Engelwood Cliffs, NJ: Prentice Hall.
- Lehrer, J. (2012). *Imagine: How creativity works*. New York, NY: Houghton Mifflin Harcourt.
- Leung, C. F. (2000). Assessment for learning: Using SOLO taxonomy to measure design performance of design & technology students. *International Journal of Technology and Design Education*, 10, 149-161.
- Levitt, T. (1983). *The marketing imagination*. New York, NY: Free Press.
- Levitt, T. (2002). Creativity is not enough. *Harvard Business Review*, August, 137-144. (Original work published 1963)
- Lucas, U., & Mladenovic, R. (2009). The identification of variation in students' understandings of disciplinary concepts: The application of the SOLO taxonomy within introductory accounting. *Higher Education*, 58, 257-283.
- Lundberg, A. (2004). Student and teacher experiences of assessing different levels of understanding. *Assessment & Evaluation in Higher Education*, 29, 323-333.
- Lunsford, D. A. (1990). Developing creative problem solving skills in marketing case analysis. *Marketing Education Review*, 1(3), 62-69.

- McCorkle, D. E., Payan, J. M., Reardon, J., & Kling, N. D. (2007). Perceptions and reality. Creativity in the marketing classroom. *Journal of Marketing Education, 29*, 254-261.
- Michanek, J., & Breiler, A. (2009). *The idea agent: A handbook on creative processes*. Malmö, Sweden: Idélaboratoriet.
- Nickerson, R. S. (1999). Enhancing creativity. In R. J. Stenberg (Ed.), *Handbook of creativity* (pp. 392-430). New York, NY: Cambridge University Press.
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*, 199-218.
- Ramocki, S. P. (1996). Developing creative marketing graduates. *Marketing Education Review, 6*(1), 47-53.
- Rust, C., Price, M., & O'Donovan, B. (2003). Improving students' learning by developing their understanding of assessment criteria and processes. *Assessment & Evaluation in Higher Education, 28*, 147-164.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. London, England: Ashgate.
- Stenberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. In R. J. Stenberg (Ed.), *Handbook of creativity* (pp. 3-15). New York, NY: Cambridge University Press.
- Strauss, J. (2011). Marketing capstone models *The Apprentice* television show with client-sponsored projects. *Journal of Marketing Education, 33*, 312-325.
- Taras, M. (2008). Summative and formative assessment: Perceptions and realities. *Active Learning in Higher Education, 9*, 172-192.
- Tassoul, M. (2009). *Creative facilitation*. Delft, Netherlands: VSSD.
- Titus, P. A. (2000). Marketing and creative problem-solving process. *Journal of Marketing Education, 22*, 225-235.
- Titus, P. A. (2007). Applied creativity: The creative marketing breakthrough model. *Journal of Marketing Education, 29*, 262-272.
- Vogel, C. M., Cagan, J., & Boatwright, P. (2005). *The design of things to come. How ordinary people create extraordinary products*. Upper Saddle River, NJ: Wharton School.
- Wingate, U. (2010). The impact of formative feedback on the development of academic writing. *Assessment & Evaluation in Higher Education, 35*, 519-533.