



## Win-Win Solutions: Applying Business Planning in a Collaborative Undergraduate Design Project

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### Abstract

*Comprehensive universities in an emerging tertiary education context require effective teaching strategies and projects to enhance optimal output that is benchmarked on an international level of excellence. This paper reports on a collaborative project applied in an undergraduate fashion design and business (entrepreneurship) programme at a comprehensive university in Johannesburg, South Africa. The purpose of this study was to enhance programme outcomes through a creative collaborative project in order to enhance the quality of business planning through an action learning approach.*

*Relevant principles were applied to the collaborative project relate to theory on collective creativity as well as action learning. Empirical data collected during the project was predominantly qualitative in nature involving: student reflections during and post-project (probed by means of a developed tool), minutes of students' action-oriented meetings, video recordings of final presentations, as well as evaluation of the final business plans proposing a workable business concept for the competitive and creative fashion industry. Data were analysed by means of content analysis of student journals, lecturers' observations of video material were documented and an analytic rubric was implemented to evaluate the quality of the business plans.*

*Findings suggest the advantages for the lecturers of the programme pertained to using the allocated time for the project optimally as they could only facilitate the process and simply explain the principles of the project and business planning instead of formally teaching the relevant theory relating to the business plan. Other critical cross outcomes were also obtained, such as enhancing communication skills in meetings and through social media, promoting cultural and students' self-awareness. The findings culminates in a framework which aims to aid collective creativity through action learning in a context of in applying a higher level of designer-like thinking to business planning.*

### 1. Introduction

Academic programmes offered at universities need to apply effective teaching strategies to develop students in a holistic manner, ensuring competency in responding to challenges in the work environment [17]. This is particularly important in an emerging context like South Africa, where a high unemployment rate and lack of job opportunities is prevalent [12]. A holistic teaching approach should enable students to acquire the expected outcomes of a project, but at the same time develop critical cross outcomes that usually relate to employability skills [8]. Employability skills and competencies require an ability to respond to challenges that are not necessary acquired through academic knowledge [4]. Comprehensive universities that offer diploma and graduate programmes have the potential to offer such effective teaching strategies.

Effective teaching strategies should ideally enhance employability skills and competencies of students [8]. In this regard, solving design problems that relate to the identification or creation of opportunities into the marketplace can be viewed from a business or design perspective and, at the same time, present opportunities for the development of employability skills.

The purpose of this paper is to report on a collaborative project between entrepreneurship and fashion design students as an effective teaching strategy to enhance the outcomes of a business planning project and facilitate a positive learning experience for students in both programmes that also develop important employability skills. This paper focuses on the synthesis skills of students and their associated experience resulting from collective creativity during their collaboration on a business plan for a developed clothing product.



## 2. Literature Review

The following brief review of scholarship is offered on action learning approaches and its applicability to entrepreneurship (specifically business planning) and design (product development). Parallels are also provided in this section with final reference to the role of collective creativity when interdisciplinary collaboration takes place to develop employability skills.

### 2.1 Action learning

Action learning can be defined as a learning process that takes into account: complex problems, real time, analyses of ideas, synthesis of solutions as well as evaluating each solution before the solution is implemented [11]. Action learning promotes the constructive criticisms of students; evaluation of the results; and by being held responsible for these actions, learning from the results so that future problem solving and opportunity-taking is improved [11]. Principles of action learning include: 1) a real problem that is usually complex, 2) a diverse problem-solving team or peers who are consulted, 3) a process that promotes inquiry, and reflection, 4) regular talks or meetings that are converted into action and, 5) a solution and a commitment to learning [13]. Action learning is frequently used in entrepreneurship education, but is also applicable to design education which requires practical application. One can argue that the applicability of action learning to entrepreneurship and design pertains to the parallels that can be drawn between these disciplines.

### 2.2 The parallels between business planning and design planning

Business planning can be described as a documentary process which outlines the core business purpose, management team, products, organisational goals and strategies to reach these goals [10]. Business planning is vital for small and large enterprises alike, as it acts as a guide for both managers and employees [19]. Business plans allow enterprises not only to carefully craft their goals, but also act as a strategic document in obtaining funding, attracting investors, reducing risk [9]. Business plans should usually contain elements such as a company description, product and service plan, marketing plan, operations plan, management plan and financial plan [19].

In an educational setting, business plans are often successfully used in assessment for learning, which allows learners to track their own progress and allows for practical assessment evaluation [5]. Action learning, in entrepreneurship education particularly, is regarded as more effective than traditional classroom-based learning. The experiential aspect of action learning can be greatly enhanced when more effective and varied student performance evaluation metrics are utilised and closely linked to outcomes [14]. In a business planning project for non-business students, research suggests that such approach increases self-confidence of students in the areas of business planning and marketing [16]. This confirms that experiential learning, by utilising the business planning approach, holds significant benefit for non-business students and business students alike [6].

Additionally, designer-like thinking is becoming increasingly important in business fields, as it can radically transform development of products, services and strategy [2]. Designer-like thinking can be developed through a design process. This process is often viewed only as a conceptual process [3]. A universally acknowledged design process proposed by Aspelund [1] is applicable to many disciplines such as apparel design, architecture and engineering. Three main conceptual skills are required for any design process is: analysis, synthesis and evaluation [1].

It is suggested that entrepreneurs create value to fill an existing gap, while designers are encouraged to create new opportunities [9]. To create opportunities, it is necessary to adopt designer-like thinking patterns with the goal to consider, imagine and to act on the creation of improved situations. One can argue that designer-like thinking is thus an important aspect for non-designers, but that a designer's input in a collaborative project may enhance outputs. From an educational perspective, synthesis between ideas of business and design students can likely enhance employability skills like teamwork, self-awareness and communication. These employability skills may revolve around the collective creativity of the team.

### 2.3 Collective creativity

Collective creativity is a phenomenon that is especially beneficial to problem solving during collaborative efforts [15,18]. This phenomenon is caused by social interactions, culminating in new discoveries and interpretations, which individuals could not have produced on their own [7]. In an educational setting this implies that collaborating group members from different disciplines could be more creative than individuals could be on their own. Different disciplines with common goals (such as entrepreneurship and fashion design students) could thus benefit from collaboration on business planning for a developed product.



### 3. Methodology

The study was qualitative in nature and followed a case study design. The population of the study included students from two modules at the University of Johannesburg, namely Intrapreneurship & Fashion Design, who were tasked with collaboratively developing a feasible, novel prototype product. Empirical data were collected through student reflections during and post-project, minutes of student action-oriented meetings and video recordings of proposal presentations. The collaboration culminated in a business proposal. Data for the study were analysed by means of three techniques, namely content analysis of reflective journals, observational techniques analysing video footage of proposal presentations, and an analytic rubric on key elements of business planning. The reflective journal accommodated and supported: 1) analysis competencies that enabled students to plan their process, meetings and define roles in the groups, 2) synthesise ideas by applying collective creativity to develop feasible, innovative ideas, 3) evaluation of the learning process and their own roles in the process. All participants were assured of their anonymity in the study as reflections were shared with lecturers.

### 4. Findings

The findings of this study is presented from a student perspective according to their action learning process. Overall, only one out of thirteen groups indicated non-enjoyment of the collaborative aspect of the project. The remaining twelve groups indicated enjoyment of the project. The most important statements demonstrating synthesis of ideas in terms of collective creativity as well as the employability skills of students' evaluation on the project are reported in Table 1.

Table 1. Evidence of synthesis of skills and competencies from the students' perspective

Project phase	Student reflection	Employability skills developed / critical cross outcomes
Synthesis	<ul style="list-style-type: none"> <li>• My group was very helpful as they came up with different ideas as to how we could get into the market with this product...coming up with two products which cater for clients and does not exclude anybody.</li> <li>• This meeting went well...they showed interest in my idea and added some of their ideas as well.</li> <li>• Certain features that will make the product a success were discussed as well as how the manufacturing procedure and assembly plant in South Africa. Discussion on how it will help create job opportunities as well as creating a tech savvy product that is innovative.</li> </ul>	Communication
	<ul style="list-style-type: none"> <li>• The meeting was just about what crucial information in the business plan and who will get what information and from where</li> <li>• The meeting helped clarify what the mistakes were and what the missing parts were in the business plan</li> <li>• I am very impressed with the entrepreneurship members...they are well informed &amp; gave their time effortlessly for the assignment...they brought a lot to the table compared to me.</li> <li>• He brought creativity, energy and enthusiasm.</li> <li>• Creative ideas were brought up. Feedback on my product and how we cater for clients and fashion industry helped.</li> <li>• They helped me with regards to how to present our product to the class as well as certain talking points that will be a key element in the presentation</li> <li>• They lacked creativity because they were too practical, however we helped each other and contributed equally to the assignment</li> </ul>	Effective Teamwork



<p>Evaluation</p>	<ul style="list-style-type: none"> <li>• It was uncomfortable meeting X...he does not like structured presentations. I was forced to write down what he was going to say in the presentation and this was difficult for me.</li> <li>• I brought creativity and knowledge about fashion design, but lacked understanding of the commercial aspects of their concepts. They need to think of a business holistically.</li> <li>• I would have researched my product more in depth so that I would have been more prepared for the questions being asked at the meetings which would therefore have limit waste of time</li> <li>• Next time I will make sure we meet more and delegate the task according to the person's skills</li> <li>• The other member brought an insight of really how the fashion world works and how that uniqueness is what is essential to their industry. What she lacked was more the business side of the industry, how the business plan functions and what the real main purpose is</li> </ul>	<p>Self-awareness</p>
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### 5. Concluding remarks and framework

Collective creativity in this project resulted when members from different disciplines in a group acknowledged each other's skills and actively contributed to the ideation process to solve a business/design problem. Reflective reframing is important during collective creativity [7]. In this study, reflective reframing was facilitated with a reflective journal that enabled students to reflect on meetings and plan for follow-up meetings. The reflections, after every meeting, therefore seemed to have assisted students to enhance teamwork, enable better communication as clear goals were set and negotiated before meetings, but also improved self-awareness of skills and shortcomings. The following framework illustrate the importance of reflection during collective projects.

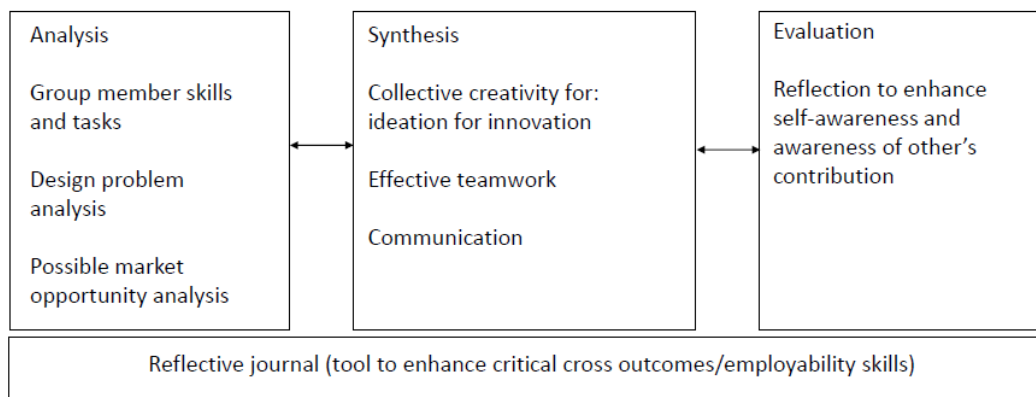


Figure 1. Framework for collaborative project on business planning for a new developed product

From Figure 1 it is evident that collaboration can enhance the student experience and learning when an action-learning approach is applied and students are given time to reflect on the analysis, synthesis and evaluation phases of a business planning project to launch a newly developed product for an identified target market. It is especially the synthesis of ideas that provide opportunities for collective creativity and integrative thinking. The authors of this paper conclude with the following thought on design thinking by Brown [2] "... design thinking is neither art nor science nor religion. It is the capacity, ultimately, for integrative thinking."

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