

# Impact of reflective practice on student engagement and confidence in a top-up bachelor programme

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## Abstract

Positioned in the context of professionally oriented higher education, we study the use of reflective practice-based learning (RPL) principles in pedagogical intervention in a Design and Business programme at a Danish university college. The context for this two-year professional bachelor programme, catering for graduates of several AP degrees, is defined by ongoing transformation as the industry and its business models undergo continual changes. Education needs to keep up with this transformation to foster graduate employability. Researchers detected a need to facilitate better transfer between students' existing knowledge, teaching, and the needs of potential employers. To overcome this perceived gap between education and specific needs of the work place we examined the impact of reflective practice-based pedagogical interventions on student confidence in their professional abilities, with an aim to foster greater co-participation at the workplace and development of professional agency.

The employed method is a case-study, collecting qualitative data including interviews, participatory observation, student video accounts, and feedback from industry professionals. The population of the research consists of a group of 16 students and four industry professionals. Using qualitative content analysis, we aim to advance knowledge of the impact of guidance and pedagogical interventions on students' perceived lack of professional confidence.

The study provided instructors with a framework for reflective practice in a heterogeneous group of students, with the scope of further enabling development of the intended curricula in a bachelor programme studied here, by articulating personal, social, and transferable competences in learning and teaching in collaboration with business professionals.

## Keywords

Professional confidence, student engagement, pedagogical interventions, student experiences, teaching practices, higher education, reflective practices, identity formation, personal and social competences

## Introduction

In higher education (HE), development of professional self-efficacy or confidence has been widely studied (e.g., Ball 2002, Albiol et al. 2020) and high levels of confidence have been linked to positive career choices. However, most scholarly contributions focus on teaching or nursing (e.g., Du, 2021, Ranta et al, 2020) whereas more research is needed in the field of business studies. In this paper, with the expectation of similar results, we examine students' professional confidence in defining their career in a professional bachelor program in Business Academy SouthWest, In the Danish context of HE, these are often referred to as top-up bachelor programs and students enrolling this program have a variety of prior qualifications from a HE level.

In this research the addressed challenge can be viewed as three-fold; 1) The student body is heterogeneous in nature, the program being a top-up bachelor, currently with intake from a range of AP degrees. This diversity in students' educational background necessitates a transformation in their own perceived and expressed professional identity. In preliminary data gathering students expressed a confusion between previous and current professional goals. 2) The industry for which the program is tailored, is equally complex, undergoing constant transformation in terms of business models, advances in technology etc., requiring employees with an extensive set of soft skills (here defined as personal and social competences). The field for which graduates can apply is wide, as the combination of business and design thinking answers the need for complex problem-solving skills. 3) Both above points call for a transformation of the education to facilitate the before mentioned personal and social competences, identity formation, and professional confidence, at this stage identifiable as students' ability to identify and articulate their own strengths convincingly. Consequently, researchers identified a need for

pedagogical intervention to facilitate learning transfer between prior learning, education, and the needs of the labour market.

In this context of vocational HE, reflective practice-based learning (RPL) is central in connecting theory with practice. Here we adopt the notions of reflection on, reflection in, and reflection with practice as argued by Dewey (1933), Schön (1990), Boud (1987), and Argyris and Schön (1991). Since these seminal works, research has advanced in the topic of reflection and learner engagement (e.g., Wahlgren et al. 2002, Ashwin & McWitty, 2015, Billett, 2019). However, there is lack of research on the impact of reflective practice on student engagement and learning transfer in top-up bachelor programs. Thus, we seek answers to the following research question:

What is the impact of pedagogical interventions on student engagement and development of professional confidence in the top-up bachelor program?

In the study, we explore the impact of reflective practice on the development of agency, co-participation, and engagement in learning affordances in what Schön terms “a Reflective Practicum”, i.e., a pedagogical space where students meet the workplace through internships or other physical interactions, case-based assignments, and other simulations. This is attempted by implementing methods of RPL in teaching settings. In the intended curricula, theory is associated with practice in several ways. These include actions that incorporate students’ own experiences into teaching and learning activities in order to foster individual meaning, especially relevant in a mixed group such as the top-up bachelor program. These actions intertwine theory and action in the form of inductive processes, in which “students build on previously acquired experience, information and data” thus also providing the students with relevant context. (Horn et al. 2020, RPL White Paper, 17). We draw conclusions from qualitative data with a mixed methods approach to deepen understanding of the role of student engagement and participation in improving learning transfer from education to the workplace.

## Theoretical Framework

Action research is defined by Argyris and Schön (1991) as a technique of intervention that operates on problems or questions perceived by practitioners within a context. Participatory action research involves practitioners as subjects for research as well as co-researchers. (Argyris and Schön, 1991, 86).

Schön views reflection in- and on action / practice as a vital element in an approach for educating professionals in artistry and preparing them to handle complex and unpredictable problems of actual practice with confidence. This reflection bridges the gap between theory and practise, is instrumental in accessing embedded knowledge, and applying learnings to various contexts. (Schön, 1990)

Wahlgren further suggests that reflection provides meaning to individual students in the learning process. States he: “Experiences are a specific and complex relationship between the individual and the wider world, in which [the two] “do something to each other”” (Wahlgren et al., 2002, 129). Furthermore, Dewey emphasises reflection in connection with experiences that produce difficulties or dilemmas, which he refers to as a “felt difficulty” (1933). Hence, reflection can be viewed as “a conscious activity in which we engage to explore our experiences and develop new understandings and conceptualisations” as argued by Boud (1987).

In vocational HE, students may experience confusion and frustration while engaging with the learning affordances in education and at a workplace. According to Dewey (1933), these appropriate disturbances are a natural part of the learning process and can even be conducive to professional confidence. (Dewey, 1933). Reflective practice is rooted in a social context and qualifies learning and actions. Billett adds to this the emphasis that in order to make the most of learning from experience, instructors need to augment the experiences to facilitate student learning (Billett, 2019). Through such pedagogical interventions, students gain access to a larger-than-their-own repertoire of knowledge-in-action through classroom activities such as instructor guidance, peer-reviews, crits, and other classroom dialogue with reference to practice (Schön, 1990).

Research has advocated for students’ active participation in learning and teaching, referring to this as student engagement. In their 2015 study, Ashwin and McWitty defined a nested hierarchy of the objects of student engagement, divided into three degrees: engagement to form individual understanding, engagement to form curricula, and engagement to form communities, where students respectively engage to improve learning outcomes, help form HE courses, and help shape the institutions and societies of which they are part. (Ashwin & McWitty, 2015.) In this study, we touch upon this hierarchy to advance understanding of the students’ role in learning transfer.

The combination of design and business in an educational program calls for the artistry of which Schön speaks, namely the ability to solve wicked problems rather than merely perform repetitive, specialised tasks. The industry itself is under constant transformation, and education leaders experience that representatives from the industry themselves are unsure of what they are looking for in graduates. Hence, the field of study lends itself to an

approach that deals with a level of abstraction and complexity and aids the students in not only learning artistry, but also in defining, articulating, and pitching their own competences to a potential employer.

Practitioners in vocational HE need to design instructional scaffolding to enable reflection in action and out of action, and to facilitate transfer from classroom teaching to the job market and from industry professionals to classroom teaching (Argyris and Schön, 1991). Based on this theoretical framework, we seek to advance understanding of the impact of different pedagogical interventions to learning transfer in the mentioned educational program.

## Methods

The context for experimentation was a Bachelors' programme in Design and Business studies, at a university college in Denmark. Data was collected from a group of 16 students, 4 male and 12 females, over a course of five months. Students ranged in age from 22 to 27 years. Nearly half (5 students) held a multimedia degree, while the remainder represented the educational backgrounds of marketing management, fashion design technology, industrial design, and service design. In addition, four business professionals representing the local business ecosystem were appointed. In data collection, an action-based approach to the research design was adopted.

Altrichter et al, (2007) and Baskerville (1999) refer to action-based research as a form of social inquiry rather than social science and thus uses an interventionists viewpoint where researchers observe and participate in the studied phenomena, thus being both agent and source of change. The case in this study was a course taught in an active learning classroom. Inspired by the action-based research approach, the data collection process evolved over five steps: Diagnosing, Action Planning, Action Taking, Evaluating, and Specifying Learning (ibid).

Action-based research being interpretive rather than explanatory, the focus here is on interpretation of students' development of agency and self-understanding using their authentic, personal accounts of their development, and comparing them with the feedback from industry professionals. Thus, the aim of this small, single-site sample of practitioner inquiry was not to generalize findings, but to gain insight into learner experiences in order to define a research base for further study of the meaning of personal epistemologies for the development of agency.

Two of the authors were instructors on the programme, whereas one author was an outside observer of the practitioner inquiry. This allowed the instructors to engage in reflective practice, achieving a form of researcher immersion, facilitating the ability of researchers to register developing circumstances and patterns vital to contextual understanding. The third researcher offered scrutiny to the method and data applied. Student inquiry was focused on discovering tacit knowledge developed by experience, and to bring it to the classroom to examine what is meaningful and salient for professional development. (Titchen et al., 2013, p 109.)

To ensure the validity and reliability of the study, triangulation was applied in the data collection; Researchers performed semi-structured interviews with students, students were invited to interview industry professionals and produce accounts of their own competence profiles and competence needs, and students participated in learning assignments designed to facilitate the development of agency, co-participation, and engagement in learning. Data resulting from this, was collected through participatory observation in activities intended to form a shared repertoire of required competences. The use of such ethnographic techniques facilitated situated researcher understanding of individual cases and informed the development of individual student profiles in the form of student videos. These were integral to the analysis of the particular circumstances.

The data collection consisted of the following cycles:

**Table 1: Instructional scaffolding used in the study**

| Action cycle  | Description   | Evaluated by |
|---|---|--------------|
| <i>Diagnosing stage to identify the gap between education and work.</i> | Interviews with internship supervisors, student questionnaires about educational backgrounds and expectations to the Ba program, and notes from annual student interviews. The above were transcribed, coded, and analysed. | Researchers  |
| 1. Pre-survey   | Mainly qualitative questions as well as 3 quantitative questions using a Likert Scale of a scale 1-7.   | Researchers  |
| Video   | A short Video reflecting on previous learning experiences.  | Researchers  |

|  |  |   |
|--|--|---|
| <i>Action planning &amp; -taking</i>   | Pedagogical interventions and guidance, facilitating reflection.   |   |
| 2. Interview with Professionals  | Interviews with company representatives in marketing positions, by groups of students. Student self-reported findings were presented in class and discussed in a collaborative learning process with instructors / researchers. Notes and student presentations were recorded by instructors during the session.   | Students & Researchers                          |
| 3. Business Model You (Clark, et al., 2012)<br>Video CV's<br>Feedback from Professionals | Assignment made by the students based on several self-reflecting exercises: <ul style="list-style-type: none"> <li>• Two-minute student video CVs by students.</li> <li>• Written accounts by industry professionals, providing formalised feedback to students on their CVs and display of confidence.</li> </ul> | Researchers<br><br>Professionals<br>Researchers |
| <i>Evaluation stage</i>  | Evaluation of the pedagogical interventions  |   |
| 4. Interviews  | Interviews with students in pairs carried out by researchers with the purpose of detecting the learning outcome of interventions.  | Student   |
| 5. Specifying Learning   | Evaluation of the pedagogical interventions using the "double - loop learning " approach by Argyris and Schön (1978).  | Researchers                                     |

## Findings

In the diagnosing stage, students self-evaluated their work-readiness on a scale of one to seven, one being not ready and seven being completely ready. In order to voice their experiences, they were also asked to create a video presentation of their professional profile. The rating was to mark a starting point for the individual journey. At this point, an average of 4.6 score was given, with no students marking their work-readiness below three. However, only three students displayed some level of professional confidence in the self-recorded videos.

*"The internship gave self-assurance to what I can do. Made me believe in what I can do."*

In the level of student experience, student accounts of learning transfer were found to be related to previously held jobs, internship experiences, and personal interests or talents. Students expressing growth of professional confidence associated this to prior experiences, allowing for the envisioning of an opportunity for learning transfer to a new professional context. Most of the students produced accounts describing professional identity development. However, the source of this was their prior, not current educational programme.

*"One example where things just worked out, was in my internship during my fashion design course. Things went well professionally and my grade was good. I learned so much and had many successes, which gave me confidence and motivation. And I was confirmed in my choice of career."*

Students' professional identity and confidence was closely tied to their educational backgrounds. When reflecting on desirable future employment and their fit to the study programme, their answers were generally vaguer, although some connection between social, personal, and professional competences and a complex professional cross-field could be seen, pointing to some reflection.

In action stages designed for reflection, students interviewed business professionals and shared findings. This helped form a shared repertoire of competence needs in the industry. They also produced a BMC You, and video CV's. Industry professionals were commissioned to give feedback on these student accounts.

*"It is obvious that she acquired a wide range of skills from her work- and life experience."*

*"The main message is to tell that he can bring creative solutions to our company - but what does that entail?" (Feedback from industry professionals)*

Taking into consideration the business professionals' feedback on the learning transfer from education to working life, student accounts were found to lack connectivity to the company needs for professional outlook. Most

students were able to reflect on action. However, verbalising it in the context of transfer to professional competences came with more difficulty. Regarding the development of professional confidence, some students were not capable of bringing their message across while others showed great confidence. Regarding identity formation, the accounts were still strongly associated with prior professions - being a fashion designer, marketing specialist, multimedia designer etc.

In the evaluation stage, closing interviews were carried out with pairs of students by the researchers. Intentional collective learning was found actuated especially from the meetings with industry professionals, and the resulting shared exchange of findings in the classroom. Furthermore, the use of BMC You tool prompted many students to re-evaluate their professional identity and wishes for their professional futures.

*"It was good to hear from her, that as long as you are a good person etc, then -all those tasks- they are something you will learn along the way and gain experience from your mistakes. It can be learned over time if you have the personal competences. It gave me reassurance somehow."*

*"It made me think of the experiences I do have in a more positive light than I had previously done."*

Based on the personal reflections and conversations with industry professionals, several students stated in the interviews that they felt more confident in approaching business professionals. The pedagogical interventions started to produce a shared repertoire of the need for competence development, and the class conversations became more articulate about the students' own personal and social competences.

Student interviews with industry professionals were found to be particularly effective. Students reported an increase in confidence with the realisation that their personal and social competences weighed heavier than professional experience and thus they had more relevant experience than first anticipated. The BMC You, was found to have fostered an increased ability to articulate said competences.

*"We don't really have any professional experiences to pitch yet. So, it gave a lot of confidence for me to realise that I could use my personal experiences and my soft skills to describe me and what I can add."*

When comparing the results of the actions in the student's learning and the focus of the teaching with those of previous years as expressed in the preliminary data, consisting of internship reports and biannual student interviews, we found that a shift had occurred in the instructors' focus from a purely content focused teaching approach to that of complimenting the knowledge component with a component of personal and social competences. This in turn produced greater awareness in the students of their individual skill set and its relevance to the industry along with individually developed, clearly defined learning objectives, i.e., greater learner agency. Upon reflection, the instructors also found a correlation between this increase in learner focused teaching with a greater mutual respect and trust, resulting in an improved learning environment.

## Conclusion

Our study was motivated by reflective practice and needed to address students' lack of confidence in workplace situations. We conducted pedagogical interventions to facilitate student engagement and transfer between their prior learning, the education, and the needs of potential employers. The pedagogical interventions allowed students to exercise agency in their own learning. Our research contributed to the first degree of the hierarchy of objects of student engagement (Ashwin and McWitty, 2015); The pedagogical interventions enabled students to understand the meaning of prior learning to their existing personal learning trajectories, thus identifying goals, levels of progression, and the activities needed to engage with to align their competences with needs of potential future employers. As Ashwin and McWitty argue (348), the focus of student engagement was on how knowledge transforms students as they engage with it, and the ways students transform knowledge as they make sense of it. Further study is needed to examine how student engagement can help transform curricula and how graduates contribute to the transformation of future workplaces.

The study examined student accounts of the experienced curricula. Due to the interventions, we gained valuable information to develop teaching strategies, and use of instructional materials with student groups from differing backgrounds. Co-participation in learning and inquiry with business professionals helped students voice the meaning of personal and social competences for their employability. These findings can further enable development of the intended curricula in a top-up bachelor programme like Design and Business studies, by articulating more clearly personal, social, and transferable competences in learning and teaching.

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