

## **PROFESSIONAL, INDUSTRIAL AND EDUCATIONAL PERSPECTIVES ON SPONSORED STUDIO TEACHING**

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### **1. Introduction**

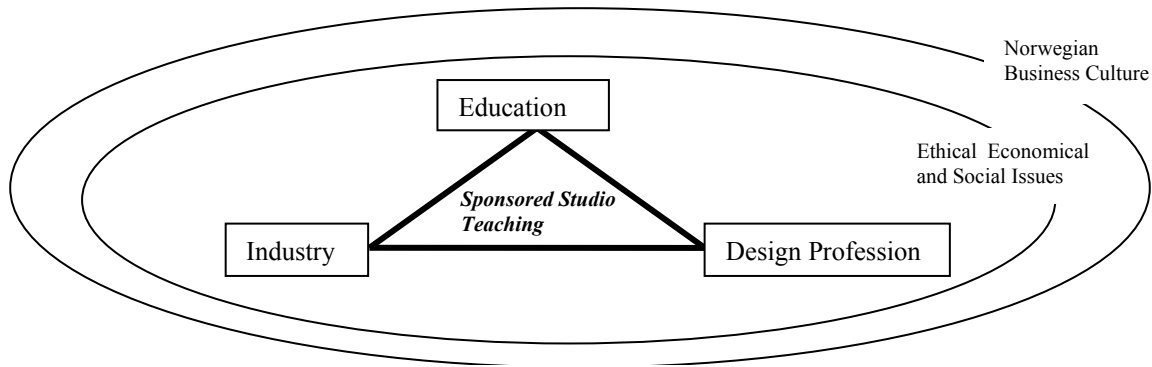
Changing technologies, attitudes and perceptions within industry and society has continuously stimulated and challenged the design profession. For some actors and organisations in the design field, these changes are being perceived as threatening rather than challenging. However, academics welcome these changes with the understanding that present and future industrial design education will be reformulated to the benefit of research, industrial collaboration and the training of prospective students. Given this situation, many round table discussions among practicing designers, academics and industry have taken place to determine the scope of industrial design education. The on-going discussion is whether design schools should emphasise on simply form giving, drawing and model making, or should more value be placed on the design process of inquiry based and conscious problem solving. Considering the direction of conscious problem solving, which is most relevant for design programs within a University system, design education quickly spreads to other disciplines, in particular marketing, management and to a certain extent the social sciences.

The implication of such a spread is that design education has become more business-oriented. Inevitably, this has led to collaborative studio teaching, where companies are asked to contribute in some form of sponsorship. In many free-market economies, for example the US, sponsorship from industry to facilitate research, design, development and teaching in higher design education are a prerequisite for collaborative projects. Even though the amount of the sponsorship is below market value, it is usually not perceived by industry as unfair business practice.

However in regulated European markets, such as Norway, business practices and the protection of “professions” is a topic of debate. Therefore, the term “sponsorship” and its strings attached should be carefully investigated and reinterpreted within the concept of sponsored studio teaching. The socio-cultural reason for the rise of this debate based on the case that “professional designers” felt side-lined and disadvantaged in the process where educational design institutions link up with industry, is that Norway is a feminine society, where small power distance prevails [Hofstede and Hofshede 2005].

This paper discusses how to adopt responsible sponsored studio teaching as common practice in design education, while taking into consideration the interest of design practitioners, professional organizations, unions and the Norwegian society.

Educational, industrial and professional perspectives will be addressed within a social, ethical and economical context based on the Norwegian business culture. Besides concerns, positive developments for the growth of the design profession derived from educational collaborative projects will be illustrated. Topics, such as type and nature of projects, level and coverage of sponsorship, learning experiences and deliverables of the project are to be discussed in more detail from the three perspectives as shown in figure 1.



**Figure 1. Educational, industrial and professional perspectives within a social, ethical and economical context based on the Norwegian business culture**

## **2. A Cultural and Economical View towards Design Collaboration among Industry, the Design Profession and Educators**

Culture is an anthropological term referring to the fundamental values, beliefs and codes of practice that make a community what it is. The customs of a society, the self image of its members, and the things that show it as different from other societies, constitute its culture [Fincham and Rhodes 1994]. Corporate Culture refers to an organization's values, beliefs, and behaviours on the basis of which people interpret experiences and behave, individually, in groups as well as towards society. Within the Norwegian 'democratic' business culture, mutual understanding and consensus in negotiation form the basis for collaboration.

In recent years both companies and research communities call for collaborative work practices and user-centred approaches in various design fields. There are several challenges and issues to be taken into consideration. For instance there is a need to find ways of collaborating across various competences, interests, responsibilities and perhaps professional languages both within one organization, between several organizations and between the organizations and a group of (potential) users [Brandt and Messeter 2004]. Considering globalisation issues, privatisation and market-like behaviour in the public sector have led to major changes for Higher Education policy-making and practice [Ntshoe 2004]. In addition, a service attitude has shifted knowledge production to cross-disciplinary, application driven, non-linear and transient collaboration, expanding the number of research or knowledge actors [Laurillard 2000], [Scott 2000].

From a design pedagogical perspective, the challenge is to shape an effective process of design that yields effective outcomes. This must be an inquiry-based process, a problem-solving process linked to effective methods for design development." [Friedmann 1997] If design faculties want to engage in industrial collaboration a shift to a more science based design education is needed. This statement is supported by Beuckers, emphasising that research and development collaboration with industry is the key factor for methodological exercise in design studies [Beucker 2004]. Complementary to the above, the Department of General Engineering at the University of Illinois at Urbana-Champaign described a long-running senior design team project. The program provides students with experience in solving a real-world, industrial design problem, working as part of an engineering design team, and communicating the results of their work in written and oral form. Students learn first-hand the engineering design process [Carnahan et al. 1992].

## **3. Ethical, Economical and Social Issues Considered from the Design Profession**

According to *The American Heritage Dictionary of the English Language*, the term professional refers to a skilled practitioner or expert who is engaged in, and earns a living in a given or implied occupation. The practitioner is required to conform to the standards of a learned profession. Occupations, which fall under the category of professional practice, are for example law, medicine, architecture and design. To develop, nurture and protect these professions, accreditation bodies and organizations, such as The Royal Institute of British Architects (RIBA), The Law Society, Societies of

Certified Public Accountants (CPA), The Society of Human Factors and Ergonomics, etc. were established at an early stage. For professions, such as medicine, law, construction, etc. which serve the basic necessities for human existence, respective professional organizations are able to exercise a significantly strong leverage and authority on how to regulate and promote “best practices” [Liem 2008].

However, as technology progresses and market forces are becoming more dynamic and complex, resulting in fierce competition, it is questionable whether certain professional organizations, representing the creative field, are effective in regulating, promoting and protecting their specific profession. For example in the field of architecture, new materials, building methods and requirements on living have partly transferred design activities towards other professions, diminishing the creative and intellectual authority of the architect. Besides that, according to the Royal Institute of British Architects (RIBA), the title Architect is protected, but the function, i.e. the activity of providing architectural services is not controlled. This means in the worst case that an unqualified individual (not connected to RIBA), who operates under the auspices of another title, e.g. *architectural designer* can provide the same services. Such situations exposes the respective professional field to internal and external threats and may easily lead to a breach of code of conduct and ethics resulting into unfair business practices.

When addressing the issue of “Design Ethics” in connection to design projects, it is more the content and motives of the project, which is being discussed, rather than the business dynamics among the various interest groups, such as industrial clients, independent design practitioners, students and educators. For example, Findeli only mentions that priority should be given to the reform of design education and that there can be no responsible design without a responsible designer, i.e. education should be directed to the development of an individualistic ethics [Findeli 2001]. But what ethics? Professional work ethics or the ethics of what and for whom to design?

Given the situation above, it would be necessary to rethink and reinterpret the criteria for best practices and code of ethics for the creative sector.

According to Johanson design Online, Code of Ethics, which is a guide based on the Model Code of Professional Conduct for Designers, accepted by the International Council of Societies of Industrial Design (ICSID), International Federation of Interior Designers (IFI), International Council of Graphic Design Associations (ICOGRADA), nothing is mentioned about unfair business practices under the categories “*The designer's responsibility to other designers*” and “*Designer's remuneration*” [www.jdesign-online.com/codeofethics.html]

The Industrial Design Society of America (IDSA) addresses proper business practices in article III: “*We will compete fairly with our colleagues by building our professional reputation primarily on the quality of our work; by issuing only truthful, objective and non-misleading public statements and promotional materials; by respecting competitors' contractual relationships with their clients; and by commenting only with candour and fairness regarding the character of work of other industrial designers*”. However, in article V it also mentioned that design practitioners should help and promote the development of design education, as well as facilitate in exposing students to real-life design situations, “*We will be responsible to design education by holding as one of our fundamental concerns the education of design students; by advocating implementation of sufficiently inclusive curricula and requiring satisfactory proficiency to enable students to enter the profession with adequate knowledge and skills; by providing opportunities for internships (and collaboratives) with and by observation of practicing designers; by respecting students' rights to ownership of their designs; and by fairly crediting them for work accomplished*”

[www.idsa.org/webmodules/articles/anmviewer.asp?a=57].

The above shows that code of professional conduct in connection to fair business practices is a relevant topic for discussion in design. However the topic is not clearly defined yet as there are many unsolved grey areas. When transferring this into the context of collaborative, sponsored studio teaching, the main dilemma is whether to involve students into sponsored industrial design projects and therefore undermining the growth of the design profession. However, the situation is much more complex. Crucial questions, which the design profession should ask itself, are for example:

- Who can brand him or herself a “Professional Designer”, since there is no accreditation body for design in the world, and therefore every one is free to practice?
- Is the scope of work for practicing designers limited to the designing of products or do they also involve themselves into teaching and tutoring?
- Are practicing designers and educational institutions really competing for the same type of projects?
- Should design practitioners not aim for priority projects with high stakes, which will never be experimented with in an educational context?
- Is it possible that the output of a collaborative studio design project create opportunities for the design profession?

From a political- economical perspective, privatisation trends in higher education encourage faculties and departments to seek and apply for a third stream of funding in addition to contributions from research councils. This third stream of funding, which encompasses contributions from industry, is of particular interest for design departments in higher education centres, as research councils generally do not prioritise design or design education as an essential research area.

Combined with the supportive Norwegian business climate, it is therefore worthwhile to explore and strategise more comprehensive forms of industrial collaboration.

#### **4. Collaborative Studio Teaching at NTNU Department of Product Design**

The concept of Collaborative Studio Teaching has been implemented at NTNU Department of Product Design for selected design modules under the auspices of module leaders, who value the importance of industrial collaboration.

The collaborative studio module at year 2 undergraduate level is being conducted over a period of 14 – 16 weeks in collaborative the spring semester. The educational focus is on *Design Methods and Processes*. In academic years 2004/2005, 2005/2006 and 2006-2007 the emphasis was placed on system and product design, collaborating with respectively Norwegian Postal Service, Porsgrund Porselænsfabrikk and Lærdal Medical. In academic years 2007/2008 and 2008/2009, the educational design focus shifted more towards product design. Collaborators were respectively Rica Hotels for 2007/2008, and Cavotec Micro-Controls, Microplast and Trondheim Kommune (City Council) for 2008/2009.

An evaluative study among students and collaborators indicated that the Rica Hotels and Norwegian Postal Service projects gained most support and appreciation as well as that tangible and intangible results were most satisfactory. The Porsgrund Porselænsfabrikk project encountered most obstacles and the collaborator was least supportive.

The collaborative studio at post-graduate level (*Year 4, autumn semester*), was initially based on product strategy and goal finding, where ‘*Product Planning and Management*’ principles were introduced. Based on two semester rounds of studio teaching over 2 academic years (2005/2006 and 2006/2007), a total of 30 well-known Norwegian companies such as, Stokke, Håg, Jordan, Helly Hansen, Tandberg, Lærdal Medical, Borealis, Vestre, Ulstein, Moelven Nordia, Kongsberg Automotive, etc. were involved in the collaboration. Each strategic design studio lasted for 16 weeks and was divided into two stages: a Product Planning & Management (PPM), and an Industrial Design stage. The collaborative structure was designed in such a manner that students individually or in pairs were allocated a company.

In the PPM stage, students were subjected to a model for integrated Product Development where they had to follow a systematic step-by step innovation model, which guided them to determine their design brief. Hereby the industrial collaborator was not permitted to directly influence the outcome of the design goals and brief. No other direct applicable models were found in the area of Systems Engineering, Macro-ergonomics or Product Service System (PSS), which could support the developments of radical ideas in the fuzzy front-end of the innovation process [Buijs 1987], [Buijs and Valkenburg 1996].

The Industrial Design stage emphasised on advanced design methods and processes, where students iteratively analysed and redefined the problem fields, as well as developed design solutions using a wide variety of analytical and generative methods.

In academic years 2007/2008 and 2008/2009, the strategic part was made more flexible, allowing various forms of (strategic) design thinking. In addition, learning objectives stressed on how to train students to act as independent professional design consultants. This flexibility in strategic emphasis was welcomed by many industrial collaborators. They were allowed to propose a project scope as long as it provided the students with sufficient space for strategic or systems thinking.

## 5. Educational Views on Sponsored Studio Teaching

Design methodologies have traditionally focused on design tasks and task management, however communication roles and strategies have not been extensively discussed in these methodologies [Hubka 1960], [Yourdon 1988]. They do not address the increasing and, perhaps, unique complexity found in design situations [Sonnenwald 1996]. Although communication and management research has addressed research, development and product management issues, as well as has provided insights and recommendations that have been incorporated into our design practices, there is a need to extend our design methodologies to explicitly include communication roles and strategies.

Given this situation, it is becoming more essential that students are being exposed to the 'real world' of design, development and realisation, the concept of sponsored collaborative studio teaching functions as a good platform for students to practice their communication, negotiation and planning skills in connection to process and methodological aspects of design.

Therefore, a study was carried out among Norwegian private and government organisations, which have previously collaborated or are presently collaborating with NTNU Department of product Design. 20 out of the 38 organisations, which were approached, took part in the study.

The interviewed organisations were mainly from the manufacturing sector (14). Five (5) belonged to the Hospitality and Service sector and one (1) to the food production industry. However their area of activity varied widely from the development and production of furniture to packaging, electronics, outdoor equipment, lighting, medical products, etc.

Most of the organisations were contacted by NTNU Department of Product Design (16), whereas two (2) took the initiative to contact NTNU Department of Product Design. In the situation of two companies, both NTNU Department of Product Design as well as the collaborating organisation took the initiative to contact each other. The most important motives for an organisation to take part in a collaborative studio project were mainly to collect wide range of ideas and concept and hopefully a brilliant design solution for low costs. However, some indicated more altruistic reasons, such as to improve the relationship with NTNU Department of Product Design and to provide the students with real-life experiences. Another important reason is to screen potential students for future recruitment.

Overall, 50% of the collaborators mentioned that their objectives / expectations were met or exceeded. The other 50% indicated that objectives / expectations were not or only partly met. Reasons given were:

- Results were variable from project to project.
- Results were abstract and strategic in nature, while the organisation expected more tangible design results
- Project period was rather short, so that students did not have sufficient time to understand the organisation as well as to develop good ideas and concepts

Concerning the **undergraduate level 2 collaborative product design studio**, where an entire class of +/- 20 2<sup>nd</sup> year design students were working with one or few organisations, based on a weekly workload of +/- 16 hours per student, 9 of the 20 companies were supportive in financially contributing to the project. The amount of sponsorship varies between 20 000 – 100 000 Norwegian Kroner (NOK) or 2.850 – 11.000 Euro (€). However, some mentioned that the sponsorship should be discussed dependent on the type of project and collaboration. 8 of the 20 organisations were **not** willing to sponsor a studio project financially. They felt that it is the duty of the educational institute to provide all the necessary financial support for the studio project. The companies were only willing to invest in time and manpower.

Regarding the **post-graduate (level 4) collaborative strategic design studio**, where projects were undertaken individually or in small groups with several organizations, based on a weekly workload of +/- 30 hours per student, 10 out of the 20 organisations were supportive in financially contributing to

the project. The amount of sponsorship varied between 20 000 – 100 000 NOK. However, some mentioned that the sponsorship should be discussed dependent on the type of project and collaboration, in particular the level of influence the respective organization is allowed to exert on the project scope. For the same reasons as undergraduate collaborative project, 7 out of the 20 organisations did not support financial sponsorship.

In general, industry is supportive of collaboration with NTNU-IPD. No additional comments were given for the undergraduate collaborative studio project. The objectives and expected results were clearly defined and easily understood by the collaborators. However, the focus of collaborative strategic design projects in the postgraduate studio should be more defined. The educational studio concept, where the organisation merely acts as a “passive” source for strategic goal finding is difficult to be appreciated. Unlike in the TUDelft “*Integral Design Project, ID4040*”, Norwegian companies would like to co-determine the direction and focus of the strategic product / design plan, as well as how the module should be organized, to a certain extent

[[www.studiegids.tudelft.nl/a101\\_displayCourse.do?course\\_id=11271&\\_NotifyTextSearch](http://www.studiegids.tudelft.nl/a101_displayCourse.do?course_id=11271&_NotifyTextSearch)].

Some companies even commented that they would like to collaborate on more rigorous project work, such as Master thesis projects. One organization gave a more thoughtful view and pointed out that collaboration would be interesting for stakeholders if the sponsorship amount is below 50 000NOK. If the amount exceeds 50 000 NOK, expectations will increase towards a more comprehensive and concrete solution. Another organization addressed the relevancy in terms of schedule and focal area: “*Our product development takes normally more than 2 years for a full product development process. The products also integrate electronics and radio, and have extreme demands on the safety levels. A student project will for us be fresh input on the exterior design, eventual input on new solutions for operating interface and ergonomics. That is only part of the product, and we see this as a useful input for our own development*”.

Others refrain temporarily from sponsored collaborative projects, because of the current economical down-turn.

## 6. Industry’s Views on Sponsored Studio Teaching

Even in nations where higher education is still heavily funded by government, such as Norway, ‘Industrial Collaboration’ is becoming more and more a relevant topic in present design education. Generally, it can be mentioned that a significant number of Norwegian companies are supportive of industrial collaboration. A total of 11 collaborating companies were involved in sponsored studio projects in the academic period 2007/2008 and 2008/2009, each contributing financially to their collaborative project in the order of 20 000 – 100 000 *Norwegian Kroner* (NOK) or 2.850 – 11.000 Euro (€).

Teaching experiences over the past four years combined with interviews have shown that the taught design methodology and organisational structure of the design studio determined the type of industrial collaboration. Two types collaboration can be distinguished, which are characterised by their objective and type of industrial collaborator. In the undergraduate level 2 collaborative product design studio the objective was placed on the generation of “many” design ideas and concepts with one or few industrial partners. Experiences revealed that industrial collaborators from the service sector, such as the Norwegian Postal Service and Rica Hotels who were not the direct producers and marketers of the designed product, were most engaging and supportive when it concerned collaborative studio teaching. These industrial collaborators are named hereafter 2nd level stakeholders. For example Rica Hotels contributed additionally with generous prizes for the three best schemes and co-hosted the final exhibition by serving a standing buffet. The Norwegian Postal Service rewarded all the students by inviting them to their main offices in Oslo after the project was completed.

Most likely, the main reason is that the service industry (*2<sup>nd</sup> level stakeholders*), as discussed above, were not satisfied with the existing range of products their suppliers had to offer. By approaching an educational design institute, these stakeholders may gain new ideas and concepts, which they can further develop with professional design offices and their suppliers.

The product development or manufacturing industry, who are the direct users of design services and hereafter named 1st level stakeholders, are supportive of collaborative studio teaching, when the

project scope and expected results are clearly outlined, taking into consideration their immediate short-, and mid-term interest.

Concerning the **post-graduate (level 4) collaborative strategic design studio**, the Norwegian manufacturing and product development industry has not reached the level of confidence, that it would entrust Industrial Design students to determine her design goal through a systematic product planning process, where subjective preferences and ideas from higher management are put aside.



**Figures 1.A and 1.B. Students presenting the final results of their Soap Dispenser project. The event was hosted by NTNU, Department of Product Design and Rica Hotels**

## **7. Design Practitioners' Views on Sponsored Studio Teaching**

A study was carried out among 13 independent design consultancies, established from 1983 onwards. Their core competencies vary widely, but the majority is active in the fields of Industrial, Mechanical and Computer-Aided Design. Strategic, Interaction and Graphic design are also well presented. In terms of portfolio, a wide spread of products can be distinguished. However Packaging, Consumer Electronics and Light Industrial products were most popular.

In terms of size, based on manpower and average yearly turn-over, 4 out of the 13 design consultancies had a manpower capacity of 3 or less and their turn over was less than 110.000 Euro (€) yearly. 9 Design consultancies employed between 4 – 12 people, out of where 8 reported to have had an average turnover of more than 110.000 Euro (€) per year. 3 Design consultancies surpassed the 538 000 (€) line.

Concerning views on industrial collaboration within studio projects, most of the respondents stated that collaboration should start at undergraduate level, latest at year 3. However the context and suitability of the project should also be considered. Main reasons are that students should be exposed to real-life situations as early as possible in their design career. Besides that it benefits them if their work gets evaluated not only by educators but also by practitioners

A majority of the design practitioners (70%) felt that they are most capable to take charge of design studio teaching, since they have hands-on design experience and are most aware of what is happening out there in the design field. From their view many academics have little or no practical experience.

To gain a better understanding on how design practitioners perceive issues connected to collaborative sponsored studio teaching, they were confronted with 12 statements.

All agreed that “Sponsored Studio Teaching” encourages companies to be more engaged and motivates students to perform better. Since both parties have invested in the project, they take each other more serious. Only one-third of the respondents felt that sponsorship may compromise on the educational objectives, direction and quality of the design program. However, there is no clear opinion whether grading and project feedback will be more thorough as funds allow the sensor to spend more time going through the reports.

Availability of funds gives students more flexibility to experiment, travel, and build more advanced models / prototypes.

From an ethical collaborative perspective, both, the University / Department and industrial collaborator should sponsor, even more the latter, as she benefits from the results in some way or another. Surprisingly, only less than half of the respondents pointed out that “Sponsored Studio



Teaching” may lead to a situation of unfair competition with independent practicing design designers and design offices. The majority (70%), even the newly started and smaller design consultancies / free-lancers, do not feel the threat, as educational design projects coming from “Sponsored Studio Teaching” are exploratory and research oriented“. Besides that, design consultancies know that industry would never collaborate with educational institutions if the stakes are higher in terms of quality and delivery. Reflecting upon the statement that “bad” student projects would damage the image of the design profession is not valid, as industry is aware of what to expect from students’ work and therefore will be more forgiving, if the collaboration and results are not according to expectations. A closer look at what design practitioners think is reasonable for an industrial collaborator to contribute in terms of sponsorship shows that the **undergraduate level 2 collaborative product design studio** for example should receive a majority vote of up to 100.000 NOK or 11000 Euro (€). For the **post-graduate (level 4) collaborative strategic design studio**, an acceptable sponsorship is found between 20 000 – 100 000 Norwegian Kroner (NOK) or 2.850 – 11.000 Euro (€). This matches the amount, which industry is willing to contribute. In case of a surplus after completion of the studio project, views are split between those who advocate that the surplus should be returned to the sponsoring organization and those who feel that it is justified for the design department to keep, with or without the intention of improving the studio course.

## 8. Discussion

Students, educationalists, industry and practicing designers acknowledge the importance of sponsored studio teaching in collaborative design projects. Teaching experiences over the past four years combined with interviews have shown that the taught design methodology and organisational structure of the design studio determines the type of industrial collaborator. In an undergraduate design studio, where for example an entire class of +/- 20 students work on one theme with one or few industrial collaborators, an emphasis was placed on the generation of “many” design ideas and concepts. Experiences have revealed that industries at the end of the value chain 2<sup>nd</sup> level stakeholders, who are not the direct producers and marketers of the designed product, are most engaged and supportive when it concerns collaborative studio teaching.

Most likely, the main reason is that they are not satisfied with the existing range of products suppliers have to offer. By approaching an educational design institute, these 2<sup>nd</sup> level stakeholders may gain new ideas and concepts, which they can further develop with professional design offices and their suppliers. The product development or manufacturing industry (*1<sup>st</sup> level stakeholders*) are supportive of collaborative studio teaching, when the project scope and expected results are clearly outlined, taking into consideration their short-, and mid-term interest.

Concerning open-ended strategic design project, the Norwegian industry has not reached the level of confidence, that it would entrust NTNU Department of Product Design students to determine her design goal through a systematic product planning process, where initial subjective preferences and ideas from higher management are put aside.

A measure to determine the level of enthusiasm and support for collaborative studio teaching among collaborators is how much they are willing to sponsor. Surprisingly, all collaborators, engaged in 2007/2008 and 2008/2009 academic year studio projects have contributed financially in the order of 20 000 – 100 000 NOK. A significant number of those interviewed are also willing to commit a similar contribution.

From sponsored studio teaching perspective, the following benefits can be distinguished:

- Collaborators, teachers and students were more engaged, because of a commitment to deliver.
- Availability of funds allowed students to experiment and travel more widely, as well as to build more advanced models / prototypes and prepare more professional presentations.
- Grading and project feedback is more thorough as funds allow the external evaluator to spend more time going through the students’ work.
- The surplus generated from collaborative teaching to be used for the continuous development of course materials and design education research to improve the respective studio modules.

However, criticism towards sponsored studio teaching may come from the direction of design councils, design organizations, such as the Norwegian Industrial Designers (NID) and directly from



independent design consultancies. It could be claimed that “*Sponsored Studio Teaching*” will lead to a situation of unfair competition with independent practicing designers and design offices and may damage the image of the profession if design results delivered by students are disappointing for the industrial collaborator.

Although unfair competition may occur with the introduction of sponsored studio teaching, not many design consultancies are bothered by it. Most feel that they are operating at a different level and are addressing projects with higher stakes. It is also surprising to know that the amount of sponsorship for the two different types of projects recommended by practicing designers almost equals that committed by industry. On the contrary, the collaborative project with Rica Hotels generated opportunities for design. The many design concepts of soap dispensers were consolidated and most likely further developed by professional designers. If NTNU, Department of Product Design did not collaborate with Rica Hotels, the latter would most likely purchase an existing model from its supplier.

This example shows how collaborative sponsored studio teaching functions as a catalyst for the development of new projects, benefiting the design profession.

Approaching the dilemma of unfair business practice from a different perspective, one should notice that the relationship between design practice and design education is transient. In many cases design academics and practitioners move back and forth from teaching to practice. Considering the situation of an established practicing designer, leading a collaborative sponsored studio, will he then be competing with himself? If there is a concern that “Sponsored Studio Teaching” undermines the growth of the design profession, the problem lies within the design profession itself. Referring to the encouraging responses from design practitioners to pursue sponsored collaborative studio teaching it can only be concluded that objections are made from the weakest in the profession.

Do we consider protecting the entire population of practicing designers on the normal distribution curve by compromising the educational advantages of collaborative studio teaching? Or do we choose to limit the lower end of the curve and thereby advocate collaborative studio teaching?

## 9. Conclusion

In this article it is made clear that “Collaborative Sponsored Studio Teaching” facilitates design learning in institutions of higher learning, as well as creates valuable input for the respective industrial collaborators. The early involvement of companies in design education has been acknowledged by the design student community as an invaluable experience and a motivator to perform better. There are no clear signals that “Collaborative Sponsored Studio Teaching” undermines the growth of the design professions by means of unfair business practices.

From a studio planning and organisational perspective, it is not always easy and sustainable to find the right industrial collaborator each semester. Therefore, it is important for every industrial design course to strategise matching studio projects with relevant industrial collaborators, where it is not always the product development or manufacturing industry, who is the main user of design services or the one most likely to be engaged in an educational collaborative studio project. The 2<sup>nd</sup> level stakeholders, belonging to the service sector, played a more active role in supporting educational collaboration.

## 10. Future Studies

The motivation for discussing “Sponsored Studio Teaching” from the three perspectives (*Education, Industry and Design Profession*) within the Norwegian context, came from, on one hand, the positive feedback, which the author as a studio leader received from students and industrial collaborators, and on the other hand the criticism from selective professional designers and organisations. Extending the interviews to an international audience of potential industrial partners and professional designers in future studies, will hopefully reveal that sponsored studio teaching is widely supported and criticisms such as “*Collaborative Sponsored Studio Teaching undermines the growth of the design professions by means of unfair business practices*” are insignificant.

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