

INDUSTRY

AS A RESOURCE IN EDUCATION

Many fields of study can implement blended learning by having their workshops arranged at or in connection with the school premises. This is not possible for aquaculture education for obvious, practical reasons.

Therefore, the way Guri Kunna upper secondary school uses local industry as an active and very significant part of their aquaculture education has its origins in two very important assumptions:

- that, Guri Kunna is granted a teaching permit for aquaculture (previously referred to as a licence)
- that many teachers are to be employed in the field of farming/aquaculture, most of whom should come directly from the aquaculture industry and have extensive experience from the industry both from operational technician and operational manager levels

The intention of the teaching permit/license is for the school to have the opportunity to create a "school workshop" where practical teaching can be carried out.

There are various ways in which the organization of such a teaching permit can be solved. Learn more about Guri Kunna's methods in this brochure.



**Trøndelag
County Authority**

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D10.3 INDUSTRY IN EDUCATION PARTNER SHIPS

**SUCCESS FACTORS
WITH GURI KUNNA**



Industry elements

Teaching permit at facilities in commercial operation

For Guri Kunna's part, it was chosen to let the first ten-year period oscillate between the three largest players in the region, Salmar, Lerøy and MoWi in such a way that these companies in turn leased the production volume from the school. Guri Kunna has been granted a new teaching permit/license for another ten years and has chosen to enter into an agreement on the rental of production volume with a single local player, Måsøval, for the entire period. The school's income is described in the agreement as being used for the development of aquaculture education at the school in particular and for raising skills in the county in general.

Financial freedom as consequence



The income from the teaching permit led to the school having a financial situation where Guri Kunna was able to invest in equipment which has been important for the development of education offers in aquaculture such as boats and offering students boat licenses so that they may drive the boats to the fish farm locations themselves.



Another and very significant effect of increased financial leeway has been the possibility of being able to divide classes into smaller groups to enable more one-to-one teaching. Concrete examples of this are class sizes during the first year where the classes are 10 students for efficient and legal use of the school's boats.



Dividing classes in year two aquaculture is another example where one day per week you have two teachers per class, and thus can divide the class into two groups of seven students. This is very important with regards to HSE and a decisive measure to be able to carry out safe and quality teaching at an aquaculture facility in commercial operation. Aquaculture subjects are on the time table for whole days at a time without blending with other subjects, which makes it possible to move the teaching out to facilities in commercial operation whenever works best. It must be emphasized that this organization of the school day is not only positive for the students who get the opportunity to work practically, but it is also absolutely crucial for the teachers' ability to stay up-to-date in an industry with rapid technological, biological and organizational development.

Aquaculture teachers with industry experience

The employment of teachers with long and recent experience from the aquaculture industry has been essential for the contact between the school and the industry world. This invaluable network of various aquaculture companies and subcontractors has a positive impact on teaching. In practice, they are in a situation where all aquaculture locations can be relevant learning locations. An important principle in such training is for students to not become passive spectators of work being carried out, but rather be active participants in the work- learning by doing. The idea behind it is that competence in the subject is the combination of theoretical and practical skills (blended learning), and that practical skills are also something that must be practiced and repeated. In practice, the students will in many cases work side by side with the employees at the aquaculture facilities. The employees will then naturally act as a supervisor and mentor on issues related to the practical performance of the profession.

In other cases, teachers will experience being given work assignments that the students must carry out together with the teacher at the facility. These are real work operations that require the companies to have confidence that the work is carried out in a manner that is satisfactory in terms of law-abidement and quality of care and production. There are examples where the school has been given responsibility for the operation of an aquaculture location for a day due to meeting activities in the company. This way of conducting practical teaching would not have been possible if the teacher- who then becomes the person responsible for that day's operation- had not had an established, relevant background and great trust from the companies.



Aquaculture Internships

In addition to the provision of one practice day per week, students in aquaculture have two internship periods of three weeks each throughout the school year. This activity is made possible through the norwegian subject "Vocational Specialization". The students are then placed at the companies for three weeks at a time. Teachers monitor the students through visiting their students while they are interning at the companies. The students then get insight into the more continuous operation of the facilities, while the teachers also get an opportunity to keep up to date with developments in the industry.

Industry guest lectures



The school invites relevant representatives from the industry and its subcontractors to the school to hold guest lectures for the students on topics that may be difficult to acquire knowledge of in other ways. Examples of this can be strategies and operations related to the use of cleaning fish, HSE work in companies and feeding fish and technological challenges related to feeding equipment.