

College: **Inverness College**

Location: **Inverness, Scotland, UNITED KINGDOM**

Practice: **Innovations in Aquaculture Training**

Distance education in a aquaculture that supports the Scottish highlands' natural resource-based economy

Year Started 1991

Budget £96,000 (\$139,000)

Program Participants N/A

College FTE N/A

Target Sector Aquaculture and Fish Farming

Staff Size N/A

Structure SVQ program

Key Outcomes N/A

Introduction

The Scottish Highlands is a rural area of mountains, rivers, and lochs that never gets farther than 50 miles from the sea. Rich in natural resources, the region depends on tourism, services, fishing, and aquaculture. Although declining, the last two industries remain very important—especially in the remote areas of the region.

Inverness College, the largest in the region, offers a range of courses in business, tourism, cosmetology, engineering, construction, and sciences. Since 1991, it has also offered a program in aquaculture. However, the distance to Inverness from the region's remote areas and the time required to be a full-time student stand in the way of many people interested in enrolling in the aquaculture program.

To help remove those barriers, Inverness College, in cooperation with the Scottish Qualifications

Authority, implemented a distance learning program in 1998 that allows participants to receive training in aquaculture at home or work. The program, however, does not stop there. In addition, college instructors travel to students' workplaces to see if and how well the students are learning and applying their lessons in their jobs. The arrangement benefits not only the student, but also the employer who gains more qualified staff without losing work time.

Community Background

The Scottish Highlands has traditionally depended upon the sea for a large percentage of its economic base. The two primary industries—sea fishing and aquaculture—are similar, but different. Both depend on processing facilities to ready their harvests for market. And both depend on marketing

Program focus	Sector specific	Economic conditions	Economic base			Target populations
			Mfg	Agr	Svc	
Technical education General	Yes	Stable	N/A	N/A	N/A	j75

<i>Service Area</i>	<i>Scottish Highlands</i>
<i>Total Population</i>	300,000
<i>Average Income</i>	£12,500 (\$18,000)
<i>% Below Poverty Level</i>	N/A
<i>% Unemployment Rate</i>	5.4
<i>% Minority Population</i>	N/A
<i>% Rural Population</i>	N/A
<i>% High School Graduates</i>	N/A
<i>% College Graduates</i>	N/A

functions to sell them. In addition, both industries require careful monitoring of resource supplies and market conditions. As for differences, sea fishing depends on shipping fleets, piers, and harbors, while aquaculture depends on fish farms and their related facilities.

Inverness College serves an area roughly the size of Belgium, but with a population of only 300,000. Thirty-six percent of the population lives in the city of Inverness. Area infrastructure and human capital resources are weak: lack of transportation, seasonal employment combined with high unemployment, and a relatively low skill base. Consequently, industries such as aquaculture that can capitalize on the region's resources and provide local employment need support. Responding to that need, the aquaculture program at Inverness was developed with input from both owners and employees of fish farms to ensure an effective, user-friendly curriculum and delivery.

Program Description

Established in 1991, the aquaculture program offers coursework leading to an SVQ Level 2 Certificate—an important step in career development within the fish farming industry. To achieve the certificate, candidates must demonstrate underpinning skills and knowledge as well as practical skills. Assessment of skills and knowledge is conducted online and in person in the workplace. In addition, students are required to present a portfolio of evidence that includes witness testimony, photographs, products, and personal statements.

Since the course is competence-based, no maximum time limit is set for completing it, though it does require a minimum of six months. The average time for completion is approximately nine months. The average age of the students who have taken the course to date is 19. As older workers see younger colleagues gaining competence, however, the number of older students has begun to increase. To date, all students have been male. The majority of students have had few educational qualifications, and those that did were at standard grade (completion of secondary education).

The training is well targeted to the skill levels existent in the industry. And by offering the course through distance learning (on the Internet), students can participate—without lost time or wages—who otherwise would not be able to. The course has also been put onto CD to enable those without Internet access to take the training. A secondary project is underway to develop the Internet learning site so that an SVQ Level 3 Certificate is also available. In addition to the value of the training itself, is the value of computer skills acquired through learning online.

The program is funded through Inverness College and Highlands and Islands Partnership Programs Objective 1 funding, with a yearly budget of £96,000. The Objective 1 Program specializes in helping businesses and communities in sparsely populated, remote communities to develop and become self-sustaining.

Outcomes

This distance learning program is not very old so it is difficult to assess outcomes. There were 23 students in the first group of participants, all of whom worked full time in the aquaculture industry. There is a second group of 15 students being recruited in 2001. In addition to the substantive value of the training to both students and their employers is the value of computer skills acquired by students by through learning online.

With respect to the industry, employers who had no previous involvement in training are now embracing this change and upgrade in the educational status of their sector.

Strengths, Challenges, and Replicability

The program's greatest strength is its ability to accommodate participants who want to expand their qualifications. In the Highlands area, the distance between remote students and training centers often prohibits participation. This type of innovative, technology-based learning program serves residents of remote areas and industries. Development of this program has also enabled mainstream students who are studying related courses to take advantage of the opportunity to reinforce and expand their knowledge by using the distance learning center, which provides additional learning materials for the participants.

Concerning replicability, the program could easily be modified to serve other industries. What's more, the Inverness program showed that, by using a project team that included a subject specialist and a production specialist, such a specialized on-line course of study could be put into operation in a relatively short period of time. Once in place, demand for such a program should rise, since students benefit with career options and advancement, industries with better-qualified employees, and the local economy with more efficient production.

For more information, contact:

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