

The Gulf and Caribbean Fisheries Professional Development Program: Personalizing the Virtual Experience

Programa de Desarrollo Profesional en la Gestión de la Pesca en el Golfo de México y la Región del Caribe — Cursos virtuales.

Profil de Programme de Perfectionnement Professionnel en Gestion des Pêches dans la Région du Golfe du Mexique et des Caraïbes — Cours virtuels.

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EXTENDED ABSTRACT

Workforce development is a process by which an organization or institution strives to improve the skills of its professional staff, and is often cited as a priority for strengthening fisheries and ocean management in developing regions, including the Caribbean. Needs span the disciplines of social, physical, and environmental sciences and include topics related to aquaculture development; marine spatial planning; data collection and analysis; geo-spatial technologies; and fisheries stock assessment. These skills may be imparted to staff on-the-job and/or through participation in professional trainings, which are typically provided through partnerships among governments, academic institutions, and international organizations. During the past decade, Florida Sea Grant has partnered principally with the Gulf and Caribbean Fisheries Institute (GCFI) and the Caribbean Regional Fisheries Mechanism (CRFM) to implement a capacity-sharing program that aims to promote the passage of knowledge among Caribbean-based resource management professionals and the scientific community. The evolution of this program from on-site to virtual learning platforms – made necessary in response to COVID-19 and made possible by advancements in distance learning curriculum at the University of Florida – is investigated through a survey with former program participants. The study explores the motivations that drive organizations and their professional staff to participate; the personal and professional benefits that have accrued to former participants, and future opportunities for further aligning the learning experience to the circumstances and needs of participants.

Since its inception, the Gulf and Caribbean Fisheries Professional Development Program has benefitted from partnerships with the GCFI and the CRFM to provide opportunities for fisheries professionals to undertake advanced training in marine resource and fisheries topics, through graduate courses offered at the University of Florida (UF) — ranked No. 1 among public USA universities by the Wall Street Journal (2023). Originally, 4-month semester-long trainings were offered for one participant per year at the UF campus. Currently, the program is able to provide this opportunity to 3-4 participants per year by transitioning to a virtual learning experience. Since its inception, the program has provided trainings to 24 fisheries professionals representing 14 Caribbean nations on topics related to fisheries management; data collection and analysis; geographic information systems; fisheries stock assessment; marine protected areas; and aquaculture. Furthermore, based on the interest of the awardees, and their performance, the program has been able to extend the curricula for those seeking to obtain a Specialized Certificate from UF in their area of interest.

An online survey was distributed to all former participants (n=21) of the Caribbean Fisheries Professional Development Program in June/July 2023. To assess the clarity of questions and to confirm the length of time to complete the survey a pilot test was conducted prior to its distribution. The final instrument was approved by the University of Florida Institutional Review Board (protocol #ET00019467). The survey was divided into three sections to obtain details about the expectations and goals of participants prior to the training, their experience and major barriers/issues encountered during the training, and self-reported benefits derived from the training. Response categories varied based on the question and included, check all that apply options, 5-point Likert scale items, open-ended responses, and one drag and drop question. Three survey invitation emails (containing the survey's link and the consent details) were sent to program participants. The online survey was created using Qualtrics software. Ordinal data were compared by group (in-person versus distance-learning) by a Mann-Whitney U-Test. using the IBM SPSS software version 29.

A total of 20 out of 21 participants completed the survey (95% response rate). Overall, the training program met participant expectations (Mean=4.9 out of 5.0, SD=0.4, n=20). Participants also rated their overall experience and the quality of the training very high (Mean=4.7 out of 5.0, SD=0.4, n=20).

Distance learning participants cited (1) managing work responsibilities on top of the training, (2) difficulty in finding the time to complete coursework, and (3) limited networking opportunities as difficulties that were not as prominently prioritized by participants of on-site trainings. Conversely, on-site training participants cited (1) missing family and friends and, (2) complications in living in another country as significant difficulties. The level of difficulty in the coursework was

an issue among a small but equal number of on-site and distance learning participants.

The results indicate that, independent of the learning platform, the program training was highly rated. Additionally, there are no statistically significant differences in the data when comparing individual item/statement responses from in-person versus distance learning groups. Nonetheless, distance learning participants felt slightly more overwhelmed by the courses taken than in-person participants, which could also be an artifact of having to manage work duties on top of training responsibilities. Currently, participant preferences are leaning more towards distance or virtual learning than on-site learning. Lastly, participants cited the desire for better communication and instructions for on-line applications to UF and course registration and conveyance of the time commitment required.

In conclusion, distance learning allows for a substantial increase in the number of participants benefiting at a much-reduced cost without significantly adversely affecting the experience and knowledge/skills gained. Most importantly, collaboration with regionally encompassing yet locally grounded organizations is a strength for this program and the cultivation of strong and committed participants. As such, involvement of the GCFI and the CRFM is crucial for maintaining program visibility and recognition; sourcing and vetting talented applicants representing the different countries in the Gulf of Mexico and Caribbean regions.

KEYWORDS: fisheries management; capacity sharing, workforce development, training