Aquatic Animal Health
Remote training courses on Learn-ink Platform

WorldFish

What is Learn.ink and how does it work?

Learn.ink is a training and learning digital platform designed for use on low-end mobile devices. It allows WorldFish and partner organizations to create and disseminate training materials remotely through interactive learning experiences on mobile devices. Learn.ink (https://learn.ink) is currently used by over 100 organizations across 35 countries. Multiple CGIAR institutions, including the International Livestock Research Institute and the International Rice Research Institute, are actively using the digital microlearning platform to reach users in Kenya (https://learn.ink/resources/best-online-training-platform-2021/kenya), Tanzania (https://learn.ink/resources/best-online-training-platform-2021/tanzania), Nigeria (https://learn.ink/resources/best-online-training-platform-2021/nigeria) and the Philippines (https://learn.ink/resources/best-online-training-platform-2021/philippines).

Using specific links generated and shared from the Learn.ink platform, new users only need to access the link(s) and register in order to start the courses developed under the WorldFish account. Each WorldFish Learn.ink training course consists of multiple modules, and every module is further divided into stages that comprise a lesson and an accompanying quiz section to assess learning effectiveness (Figure 1).
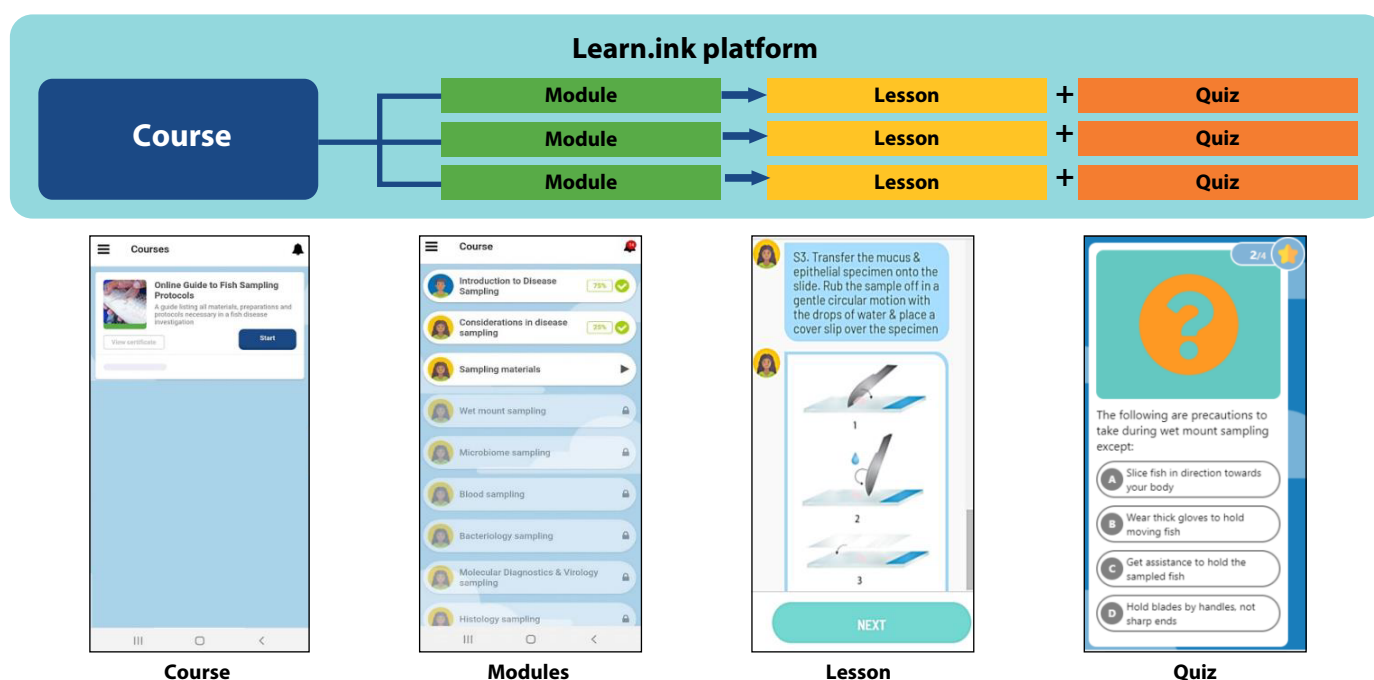

Figure 1. Structure of a micro-curriculum on Learn.Ink. WorldFish micro-curriculums developed on the Learn.ink platform are organised into courses, modules, lessons and quizzes.

How do Learn.ink courses benefit content creators and course users?

Lessons are where the content creators can share training and learning materials in the form of text, images and URLs to external resources (audio, videos, PDFs). Content and survey questions on various topics are placed within each lesson to push and pull general information from course users about their background, experience or current practices. A quiz also follows each lesson for course users to self-assess what they have learned from the previous lesson. Course users have the option to repeat both completed lessons and quizzes at any time using their mobile devices. All that is needed is a reliable internet connection. Additionally, content creators can opt to place the quiz before each lesson to gauge the course users' baseline knowledge before being trained. Once users begin accessing the courses, content creators will be able to obtain near real-time analytics on each user's progress through the Learn.ink dashboard (https://docs.learn.ink/creating-courses/viewing-course-analytics/). The analytics provide information on course completion rates and quiz accuracy rates as well as aggregate responses from survey questions.

WorldFish courses can be contextualized for specific user groups using the course builder tool (https://docs.learn.ink/creating-courses/creating-a-course/). Each published course on Learn.ink can be shared with target communities through specific URLs that will automatically group new users, such as enumerators groups, farmers groups, researchers and field officers, who sign up to the course using that link.

Through WorldFish Learn.ink courses, users will have a more convenient way of learning on-the-go using only their mobile devices. Our courses provide an alternative method for long-distance training by engaging users in an interactive chatbot-like learning environment. Our online training courses can serve to prepare targeted audiences in advance of face-to-face or virtual workshops. Users will be able to start, pause and complete our courses at their own pace, and they will receive a digital certificate at the end of each course. Users can also participate in discussion threads at the end of each course to share their inputs and questions with course creators and other users within the Learn.ink community. The Learn.ink team is currently working on redesigning and upgrading the way communities work on Learn.ink. The team aims to build this as a standalone feature within the platform that allows organizations to separate courses and groups of users who can form community discussions.

WorldFish has developed a number of Learn.ink courses and user guidelines summarized in Table 1.

Courses by WorldFish	Purpose	Modules	Links
Aquaculture survey with Open Data Kit (ODK) course	The aquaculture survey with the ODK course* was developed to provide guidance on how to prepare and conduct digital farmer surveys, install and use the ODK Collect mobile app and learn how to implement our Fish Epidemiology and Health Economics survey tool.	1. Role of enumerators 2. Basic operations 3. Questionnaire	Aquaculture survey with ODK course on Learn.ink: https://bit.ly/3AYXUGQ End user guidelines: How to sign up and access the course on aquaculture survey with ODK on Learn.ink: https://hdl.handle.net/20.500.12348/4894
Fish sampling course for disease diagnostics	The fish sampling microcourses** were developed to provide the necessary guidance, preparation, skills and knowledge to end users on how to perform one of the six major fish sampling methods for disease diagnostics: (1) wet-mount sampling, (2) microbiome sampling, (3) blood sampling, (4) bacteriology sampling, (5) molecular and virology sampling, and (6) histology sampling	1. Intro to fish sampling for disease diagnostics 2. Foundations in fish disease sampling 3. Wet mount sampling 4. Microbiome sampling 5. Blood sampling 6. Bacteriology sampling 7. Molecular and virology sampling 8. Histology sampling	1. https://bit.ly/39RfhO0 2. https://bit.ly/3kVQm1W 3. https://bit.ly/3ojMTfT 4. https://bit.ly/2XZ5931 5. https://bit.ly/3F82nd4 6. https://bit.ly/3oljnX2 7. https://bit.ly/39VaGdu 8. https://bit.ly/3zUCKs4 End user guidelines: How to sign up and access the fish sampling microlearning curriculum on Learn.ink: https://hdl.handle.net/20.500.12348/4897
Fish syndromic surveillance course	The fish syndromic surveillance course was developed to train users on how to identify typical clinical signs of fish disease, basic syndromic surveillance and how to use our rapid digital reporting tool for fish disease outbreak investigations.	1. Major clinical signs of fish diseases 2. Introduction to syndromic surveillance 3. Rapid digital reporting tool for fish disease outbreak investigations	Fish syndromic surveillance course on Learn.ink: https://bit.ly/3FmiCmz
Fish farm biosecurity course (under development)	The fish farm biosecurity course was developed to introduce course users to basic knowledge of farm biosecurity and to provide guidelines on how to improve biosecurity at their farm/facility.	1. Biosecurity preparation 2. Disease outbreak response measures 3. Biosecurity audit checklist	Under development

*   The course is designed to train and teach participating team leaders, principal investigators, co-investigators and enumerators prior to virtual or face-to-face training on conducting ODK surveys in the field.
** The microcourses are aimed at preparing participating enumerators, extension workers, service providers and lead farmers with the skills of quality biological sample collection in the event of disease outbreaks or high mortalities.

Table 1. Courses developed by WorldFish on Learn.ink.

WorldFish intends to implement these training courses with ongoing and future projects in focal and scaling countries, including Bangladesh, Egypt, Nigeria, Malawi, Ghana and Kenya.