

Distinctive Specialty Course: Cephalopods Diver



Instructional Design Document

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PROJECT CONTEXT

Sail Dive Explore is a boutique adventure tourism company specialized in scuba dive certification and unique water-based experiences. Located in the vibrant marine ecosystem of the United Arab Emirates, the company operates as a small business led by a passionate PADI-certified dive instructor with a team of 5 subcontracted dive instructor professionals.

Proposed Solution

Development of an Instructor-led Training (ILT) distinctive specialty course to augment the conventional PADI course offerings, providing in-depth understanding and appreciation for cephalopods among student divers.

Desired Impact

The introduction of the Cephalopods Distinctive Specialty Course is poised to position Sail Dive Explore as a leader in specialized dive education within the UAE. The course aims to foster a deeper connection between divers and the marine ecosystem, particularly the intriguing cephalopod species. Through this course, the company anticipates:

- an expanded reputation as a pioneering dive shop offering an exclusive certification
- expanded customer base by attracting new dive students
- increased engagement from returning dive students
- heightened awareness for marine conservation

Ultimately, the goal is to enrich the company's service portfolio, drive growth in course enrollments, and elevate overall customer satisfaction.

NEEDS ANALYSIS

Knowledge Gap Diagnosis

The conception of this course is a direct response to the curiosity and knowledge gap exhibited by students and divers regarding the local cephalopod population. Noticing a pattern of intrigue and a lack of structured information, the company launched a survey to gauge interest in a specialized certification course. With 18% of respondents showing enthusiasm for such a certification, Sail Dive Explore saw the potential for innovation in their educational offerings.

Learner Personas

The primary audience for this course comprises adventure-seeking individuals predominantly aged between 25 to 45, with a gender balance reflecting the broader diving community—approximately 40% female. These learners will be certified PADI Open Water Divers or above (course prerequisite), possessing a foundational understanding of diving and a keen interest in marine biology. They exhibit a preference for hands-on learning experiences and value courses that offer both theoretical knowledge and practical application. Technology-wise, they are competent, with access to modern devices and a propensity to engage with digital learning tools.

Delivery Environment

The UAE's marine settings provide an ideal backdrop for in-water sessions, which are integral to the course. The learning environment will be a combination of classroom settings equipped with multimedia presentation tools for Instructor-led Training (ILT) and natural open-water sites for practical dives. The temperate to warm climate allows for year-round diving, which is conducive to flexible scheduling of the course offerings.

DESIRED OUTCOMES

Performance Goals

The Cephalopods Distinctive Specialty Course aims to solidify Sail Dive Explore's standing in the scuba dive certification market with the following quantifiable goals:

- Elevate the brand image as a provider of specialty dive courses, aiming for a 10% increase in brand recognition as measured by online mentions and dive forum discussions within the first year of course launch.
- Boost the number of unique course enrollments by 15% within the first 6 months, attracting divers seeking specialized knowledge and skills.
- Improve customer retention by 10% over the previous year, as evidenced by repeat bookings and referrals.
- Develop a community of environmentally aware divers, with at least 30% of course participants actively engaging in post-course conservation initiatives and community events.

Learning Outcomes

Participants enrolled in the Cephalopods Distinctive Specialty Course will be equipped with the knowledge and skills to:

- Accurately identify at least 10 different cephalopod species indigenous to the Gulf region, recognizing their unique behavioral patterns and habitat preferences.
- Demonstrate an understanding of cephalopod biology and ecology with an 80% pass rate on a knowledge assessment administered at the end of the course.
- Apply best practices in ethical diving and interaction with marine life, achieving a 100% compliance rate with PADI's Responsible Diver Code during practical assessments.
- Create at least 1 post-course action plan or commitment to cephalopod conservation, contributing to Sail Dive Explore's conservation outreach program.

LEARNING SOLUTION

The Cephalopods Distinctive Specialty Course will be designed to be intensive yet engaging, covering a comprehensive curriculum within a 10-hour timeframe:

Classroom Sessions

- **Introduction to Cephalopods (1.5 hours):** An engaging ILT on cephalopod diversity, characteristics, and cultural importance, with interactive Q&A.
- **Cephalopod Biology and Behavior (2 hours):** Insightful session on anatomy, behaviors, and communication, supported by video content and cephalopod models for tactile learning.
- **Conservation and Ethical Diving Practices (1.5 hours):** Discussion on conservation issues and responsible diving strategies, with participatory planning exercises for ethical encounters.

Open Water Dives

- **Practical Dive Planning (0.5 hours):** Concise briefing on dive techniques, safety checks, equipment handling, and responsible diving.
- **Observation Dives + Debriefs (3 hours total):** Two sequential open water dives focusing on cephalopod observation, incorporating learned knowledge and skills, punctuated by immediate debriefs.

Debrief and Assessment

- **Knowledge and Skills Assessment (1 hour):** Integrated written and practical assessments to validate learner comprehension and practical proficiency.
- **Course Debrief and Conservation Pledge (0.5 hours):** Reflective session to consolidate learnings, exchange experiences, and pledge towards cephalopod conservation efforts.

Total Duration: 10 hours (5.5 hours classroom, 3 hours practical, 1.5 hours assessment & debrief)

INSTRUCTIONAL STRATEGY

Instructional Approach

The Cephalopods Distinctive Specialty Course will employ adult learning principles, emphasizing experiential and practical learning:

- **Experiential Learning:** Aligning with Kolb's Learning Cycle, the course will provide experiences for concrete learning, reflective observation, abstract conceptualization, and active experimentation.
- **Scaffolding:** The course will start with fundamental concepts and build in complexity, enabling learners to build upon their knowledge step by step.

- **Feedback Loops:** Continuous feedback mechanisms during and after activities will allow for reflection and knowledge reinforcement.

Delivery Methods

The knowledge portion of the course will be delivered in a classroom setting with a small-group ratio of up to 8:1, participants to instructor respectively. A blend of synchronous Instructor-led Training (ILT) methods that cater to diverse learning styles will be utilized:

- **Interactive Lectures:** To engage learners and facilitate retention, instructors will use storytelling, guided discussions, and multimedia presentations. This approach allows for real-time feedback and personalized instruction.
- **Hands-on Activities:** Participants will engage in hands-on activities to reinforce theoretical knowledge, including using specimen samples and other tangible dive resources.
- **Group Work:** Collaborative exercises and problem-solving tasks will encourage peer learning and knowledge sharing.

Learning Materials

The course will utilize a variety of learning materials to support the instructional strategy:

- **Participant Workbook:** A comprehensive guide including information on cephalopod species, biology, conservation, and diving practices, complemented by visual aids and knowledge checks will be provided for participants.
- **Visual Aids:** High-quality images, diagrams, and videos will be used to illustrate concepts, accessible via interactive whiteboards or projection screens in the classroom.
- **Practical Dive Checklists:** To ensure safety and structure during the open water dives, waterproof checklists and guides will be provided.

Technologies Utilized

While the course is primarily instructor-led, certain technologies will enhance the learning experience:

- **Presentation Software:** PowerPoint will be utilized for structured presentations to guide the classroom sessions.
- **Interactive Whiteboards:** Allowing for dynamic, interactive presentations and the ability to annotate and highlight key points during lectures will enhance instruction.
- **Underwater Cameras:** During open water dives, participants will use cameras to document sightings and behaviors of cephalopods, which will later be used for debriefing and assessment.

ASSESSMENT STRATEGY

Learning Outcomes Assessment

The assessment strategy for the desired learning outcomes of this course will be designed to measure both knowledge acquisition and the practical application of skills in a variety of contexts:

Formative Assessments

- **Quizzes:** Short, informal quizzes after each major topic to gauge immediate understanding and provide feedback will be used.
- **Practical Skills Demonstrations:** During classroom sessions, learners will demonstrate their ability to handle and identify cephalopod specimens, with immediate corrective guidance as needed.

Summative Assessments

- **Knowledge Assessment:** Aligned with PADI standards, a comprehensive written multiple-choice test will conclude the classroom sessions. A pass rate of 80% is required to demonstrate proficiency in course material. In the event of a score below the threshold, the participant will engage in a one-on-one review of missed questions with the instructor, followed by an immediate opportunity to retake the assessment.
- **Dive Skills Evaluation:** Practical skills will be evaluated during the open water dives where instructors will observe and assess divers' adherence to safe and ethical diving practices, along with their observational skills and respectful interaction with cephalopods. The assessment will follow a standardized checklist to ensure consistency and fairness.

Assessment of Commitment to Conservation

- **Conservation Action Plan:** As a course wrap-up, participants will develop a personal action plan detailing how they will contribute to cephalopod conservation, which will be reviewed and discussed with the instructor.

Feedback Mechanisms

- **Instructor Feedback:** Verbal and written feedback will be provided throughout the course, with a focus on positive reinforcement and constructive suggestions for improvement.
- **Peer Review:** Opportunities for peer-to-peer feedback will be facilitated during group work and debrief sessions, promoting a collaborative learning environment.

Sample Knowledge Assessment Questions

Knowledge Assessment questions will be multiple-choice aligned with PADI standards. The following are a sample from each Knowledge Development section:

Introduction to Cephalopods:

Which of the following is a distinctive feature of most cephalopods?

- A) Bony skeleton
- B) External shell
- C) Air bladders for buoyancy
- D) Ability to change color rapidly

Cephalopod Biology and Behavior:

Cephalopods like the common cuttlefish exhibit sophisticated behaviors in their environment.

Which of the following behaviors is associated with their hunting technique?

- A) Emitting a loud noise to disorient prey
- B) Camouflaging with their surroundings to ambush prey
- C) Using their tentacles to create a current and dislodge hidden prey
- D) Releasing ink to obscure the water and confuse prey

Conservation and Ethical Diving Practices:

What is the most important consideration when diving in cephalopod habitats to ensure ethical interaction?

- A) Minimizing physical contact with marine life
- B) Taking souvenirs from the dive site
- C) Feeding the cephalopods to observe natural behavior
- D) Diving without a buddy to reduce disturbance

Practical Diving Skills:

When planning a dive to observe cephalopods, what is an essential aspect of dive preparation?

- A) Ensuring the use of bright lights to see clearly underwater
- B) Choosing a dive site known for strong currents
- C) Checking all equipment for proper function and fit
- D) Planning to capture a cephalopod for closer study

Community Engagement and Advocacy:

Which action best exemplifies a diver's role in cephalopod conservation post-training?

- A) Reporting sightings to local wildlife authorities
- B) Collecting cephalopod specimens for personal research
- C) Teaching others about cephalopods without certification
- D) Selling cephalopod images for profit

Performance Goals Evaluation

The evaluation strategy for the desired performance goals of this new course offering will be designed to measure the impact on Sail Dive Explore's market standing and customer engagement:

- **Brand Recognition:** Utilize social media analytics to track online mentions and engagement in dive forums. A baseline measurement will be taken pre-launch, and incremental checks will be scheduled to monitor growth towards the 10% increase goal.
- **Course Enrollment:** Analyze enrollment data to compare the number of unique course sign-ups before and after the course launch. Enrollment trends will be reviewed monthly, with a detailed report at the six-month mark to assess the 15% growth target.
- **Customer Retention:** Compare the repeat booking and referral rates on a quarterly basis with the previous year's data. Customer feedback surveys will be conducted post-course to identify reasons for retention and areas for improvement.
- **Community Engagement:** Track participation in conservation initiatives through sign-ups, event attendance, and active involvement in projects. A post-course survey will be utilized to measure participants' commitment and to quantify the 30% engagement rate.

Each of these metrics will be captured in a comprehensive performance report, reviewed quarterly, to gauge progress towards the stated goals. Adjustments to the course marketing, content, or delivery will be made as necessary, based on the evaluation insights gained.

DEVELOPMENT TOOLS

The creation and facilitation of this course will utilize a suite of tools designed to support effective instructional design and delivery:

- **Google Workspace:** Central to the course's content creation and administrative coordination, Google Docs will be used to develop the Instructor Guide and Participant Workbook, enabling real-time collaboration and feedback. Google Sheets will organize and monitor participant data, including registration details and assessment results.
- **Microsoft PowerPoint:** The primary tool for designing the course's visual and instructional presentations, PowerPoint will be used to create compelling slides that incorporate multimedia elements such as images, videos, and animations, which are crucial for illustrating the intricacies of cephalopod life.
- **Canva:** A graphic design tool essential for creating visually engaging supplementary materials, including dive checklists and promotional resources. Canva's intuitive design capabilities will allow for the quick production of high-quality printables that enhance the learning experience.
- **Underwater Cameras and Equipment:** GoPros will be used in practical dive sessions, allowing participants to document their observations and interactions with cephalopods. The footage captured will be used for debriefing and assessment, as well as for creating a visual repository of cephalopod sightings.

These tools have been chosen for their reliability, ease of use, and ability to create a cohesive and comprehensive learning experience for both instructors and participants. They will ensure that all course elements, from administrative tasks to content delivery and participant engagement, are effectively managed and delivered.

PROJECT MANAGEMENT

Project Phases

1. **Information Gathering (1 week):** An initial phase dedicated to collecting all necessary information, including meetings with key stakeholders and dive instructors to outline course requirements, expectations, and the scope of the practical dive section.
 - **Milestone:** Initial course outline established
2. **Content Development (3 weeks):** The first draft of the course content, including the Instructor Guide and Participant Workbook, will be developed using Google Docs. PowerPoint presentations for classroom sessions will be created in parallel.
3. **Material Design (1 week):** Concurrent with content development, Canva will be used to design supplementary materials such as dive checklists and promotional brochures.
 - **Milestone:** Completion of the first draft of all course and supplementary materials
4. **Review and Revision (1 week):** A comprehensive review of the course materials will be conducted to ensure accuracy, clarity, and engagement. Revisions will be made based on feedback from stakeholders and dive instructors.
5. **Pilot Testing (1 week):** A pilot session will be conducted with a group of 4 participants and 2 instructors to gather feedback on course effectiveness and areas for improvement.
 - **Milestone:** Successful pilot session conducted and feedback gathered
6. **Final Adjustments (1 week):** Feedback from the pilot test will be incorporated into the course materials to finalize them for official rollout.
 - **Milestone:** Incorporation of pilot feedback and preparation for launch
7. **Implementation (ongoing):** The official launch of the course, with ongoing assessments and adjustments based on participant feedback and performance.
 - **Milestone:** Official launch of the course

Timeline

The development and rollout of the course are planned over a 6-week period, with a buffer week for unexpected delays, ensuring that the course is ready for implementation within 2 months from the project start.

Resource Planning

- **Personnel:** The team will consist of a lead instructional designer responsible for content creation and graphic design of the material aesthetics, and PADI-certified dive instructors for the practical component.
- **Equipment:** Sail Dive Explore will procure underwater cameras (GoPros) and related diving equipment for the course's practical sessions.
- **Budget:** The agreed-upon estimated budget will cover personnel costs, material production, equipment acquisition, and marketing efforts for course promotion.

Estimated Budget

Based on freelance instructional design industry standards and the specific scope of this course:

- **Instructional Design, Content Creation, and Graphic Design:** \$6,500 (based on an average rate of \$50/hour for an estimated 130 hours of work)
- **Dive Instructors (SME) Consultation:** \$600 (based on an average rate of \$20/hour for 30 hours of collaborative work)
- **Equipment and Materials:** \$2,000 (for underwater cameras, printing of course materials)
- **Marketing and Promotion:** \$1,000 (for the initial marketing push, promotional activities)

Total Estimated Budget: \$10,100

Quality Assurance

- **Quality Checks:** Throughout each phase, quality checks will be performed to ensure alignment with PADI standards and instructional design best practices.
- **Branding and Visual Style Compliance:** All course materials, including the Instructor Guide, Participant Workbook, and promotional content, will adhere to Sail Dive Explore's branding and visual style guide. This ensures a consistent and professional presentation that aligns with the company's brand identity.
- **Industry Standards Adherence:** The course structure, content, and assessment strategies will be developed in accordance with PADI's standards for a Distinctive Specialty Course. This includes meeting specific educational objectives, safety protocols, and environmental guidelines set by PADI to ensure the course is eligible for official approval.
- **Course Evaluation:** Post-launch, participant feedback will be systematically collected and reviewed to maintain high standards and continuous course improvement.

PROJECT SIGN-OFF

Project Name: Distinctive Speciality Course: Cephalopods

Client Company: Sail Dive Explore

Instructional Designer Agreement

I acknowledge that I will deliver upon the product and its specifications outlined in this document in accordance with the stated time frame. Significant changes will be communicated to the client and will necessitate a renewal of this agreement.

Signature

Date

Client(s) Agreement

I agree to the terms of this course and will deliver upon any responsibilities outlined within its development.

Printed Name

Role

Signature

Date

Printed Name

Role

Signature

Date