

Currents



Quarterly Journal: October 2016, Vol. 10, No. 4

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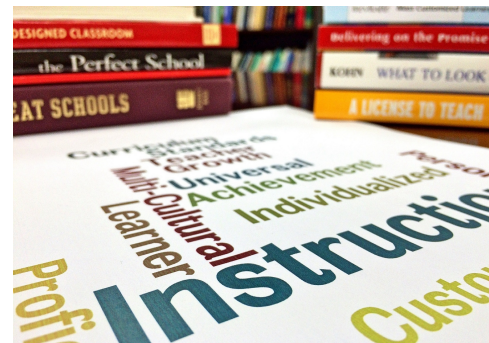
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Seek for Learning and Growth

As we look ahead to another year closing and a new one beginning, it's the perfect time to take a moment to reevaluate our lives, to take stock of where we are, look towards where we would like to be and develop a plan to get there in all aspects of our lives – whether professionally or personally.

At the upcoming DEMA Show in Las Vegas, numerous courses and seminars will be available, covering countless topics from medical aspects related to diving and training re-certifications, how to prepare for unexpected crises, new equipment releases to stay on top of trends and gear modifications, marketing and sales techniques to grow business, all the way to networking to connect with others in the industry.



As we look ahead, we can pause and think of ways we can improve our teaching techniques to continue helping students become skilled and safe divers, comfortable and competent in the water, while occasionally intervening when there are potential underlying ailments that could negatively impact them. We need to be their advocates even when the result may restrict them from diving in the future. We can analyze and discuss our industry standards to determine ways to reach more divers and better match certification levels with skills and training times.

May we all choose to make a difference whether in our personal lives, the community around us, or the environment we enjoy.

Renew Now for 2017

Renew before December 31 and take advantage of the early discount. Click your agency link below to be taken to the form:

PDIC http://www.pdic-intl.com/pdfs/renewal_2011.pdf

SEI <http://www.seidiving.org/clientuploads/2017%20Leadership%20Renewal%20Application.pdf>

SCUBA EDUCATORS INTERNATIONAL 2017 Leadership Renewal Application
All 2017 renewals expire 12-31-2017 regardless of date of renewal.

1 Personal Information

Name: Last First Middle
Date of Birth: Month Day Year
SEI#
Street Address
City
State/Province Postal/Zip Code
Country
E-Mail
Phone 1 Phone 2
Website
Dive Center
Attach Photo Here

2 Leadership Renewal Level and Fees

Select Level	Discount Rate Before December 31	Regular Rate After January 1, 2017
<input type="checkbox"/> Diver/Master	\$ 80	\$125
<input type="checkbox"/> Assistant Instructor	\$ 80	\$125
<input type="checkbox"/> Instructor**	\$135	\$185
<input type="checkbox"/> Instructor Trainer**	\$150	\$200
<input type="checkbox"/> Inactive Instructor	\$ 75	\$ 75

**New scuba & liability insurance

Reactivation Fee
If an Instructor Trainer, Instructor or Assistant Instructor did not renew in the previous year, there is an automatic Reactivation Fee of \$25.
Additional requirements may also be necessary. Please contact the SEI offices at 765.281.0600 or info@seidiving.org

SCUBA NEWS

World Octopus Day
Right: a common octopus
By albert kok - ma photo, CC
BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=2795257>



NATIONAL DAYS

October - December Events

- October 4 National Make a Difference Day
<http://makeadifferenceday.com/>
- October 8 World Octopus Day
- October 24 United Nations Day
- November 1 Extra Mile day
- November 3 Jellyfish Day
- November 11-17 World Kindness Week
- November 13 World Kindness Day
- November 15 National Philanthropy Day
- December National Day of Giving (Tuesday after cyber Monday)
<http://www.givingtuesday.org/>
- December 4 World Wildlife Conservation Day



Jellyfish Day
Left: pictured is a
Moon Jelly
By © Hans Hillewaert,
CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=4657309>

Coming in November

EXPAND YOUR WORLD



DEMA SHOW 2016

Las Vegas Convention Center

Las Vegas, Nevada

NOVEMBER 16-19

SEI & PDIC booth #7035



<http://www.demashow.com/dema2016/public/enter.aspx>

WHY ARE DIVERS DROWNING?

By Kenneth L. Tuttle Wilhelm, MSpSc, SEI & PDIC Course Director, Malaysia

Around the world, medical examiners, when recording a cause of death of a scuba diver, most often cite death by drowning. But we know through the research of organizations such as Divers Alert Network (DAN), that drowning is actually only the end result of a series of events leading to a fatality.

Over the years, the research has remained pretty consistent, drownings caused by equipment failures is a really small number, with death-drownings caused by health issues such as cardiac arrest, also representing a relatively small percentage.

What is consistent, are that the causes of the majority of fatalities in scuba are not immediately discernible during a medical examination. Analyzing and figuring out the chain of events leading up to the drowning is what provides information that is important to the industry.

When all the research is reviewed, it becomes apparent that on average, significantly more than 80% of diving fatalities are not due to equipment failure, or health issues such as cardiac arrest.

The common causes of diving accidents are: problems with buoyancy control, running out of air, rapid ascents, failure to correctly use equipment, and repetitive deep diving.

As instructors, it should be relatively simple to understand that these causes are either failures of divers' motor skills, or their cognitive application of safe diving practices.

The value of this information, gleaned from the research conducted by DAN and other investigators, is that instructors in the field (the pool, and ocean), should use the data with a priority focus on skills and knowledge from which most injuries and fatalities are subsequently developing.

What is the role of the instructor in this? What can an instructor do to reduce the chances of their students ever making these mistakes?

First, as instructors, we have a moral and ethical responsibility to be sure



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Why Are Divers Drowning? continued from page 3

that we've given our most professional effort for every student, as we guide them towards certification. And this means paying particular care in the educating and training of our students, when they are learning about the ultimately critical skills of buoyancy and air supply management.

Second, we need to be absolutely sure that not only a complete training program has been provided, but that we have remained stringent in applying the standards' requirements for mastery of skills, knowledge, and attitude.

To finish off, I'd like to suggest a final 'ABC' check-off for students about to receive their Open Water Diver (ISO/EUF Level 2 Autonomous Diver) certification:

- A – Air Supply Management (constant awareness of air supply, and being able to make correct decisions on turn-around based on the current dive conditions)
- B – Buoyancy Skill (capable of conducting a dive from surface to bottom to surface again, without need of line or reference, all while maintaining good posture and trim)
- C – Correct Weighting (the diver should be able to, in an educated manner, calculate the weight needed to be neutrally buoyant at the end of the dive, at 5m, with the tank at the expected reserve, and a BC empty of air)

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Why Properly and Honestly Filling Out Medical Forms Prior to Attending Scuba Classes Is a Safety Concern

By Jupesi "José" González, SEI Assistant Instructor & EMT-B

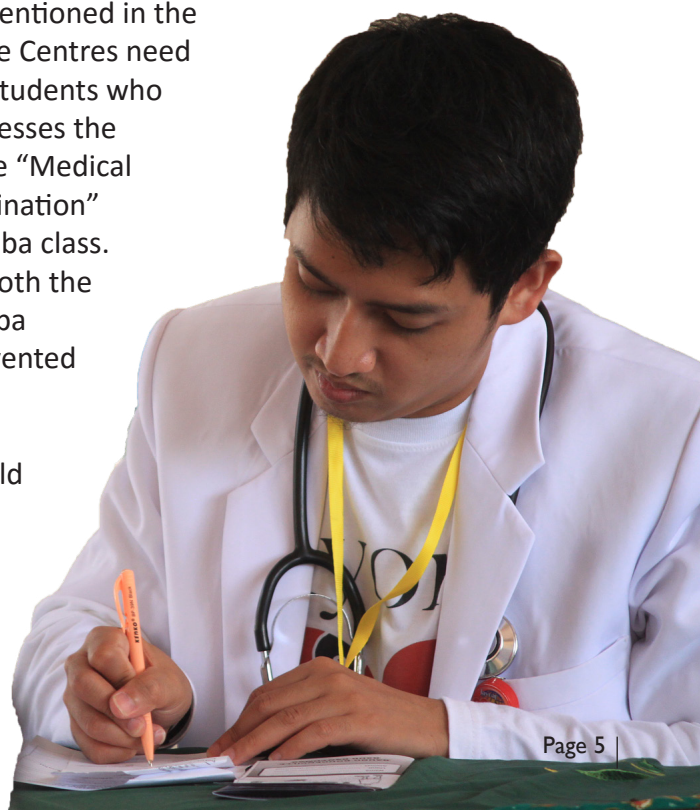
In my recent SEI Scuba Instructor Institute, during the August 2016 training session, much discussion was focused on the medical forms that the students have to fill out prior to the start of their scuba training and seeing that they are properly and honestly filled out.

One aspect of properly filling out the medical form questionnaire in regards to answering the list of yes or no questions is by writing out "YES" or "NO" instead of just writing "Y" or "N" next to each question. Another aspect of making sure that the medical forms are properly filled out is that it is done so by a qualified medical professional. I learned what to look for on the medical forms such as anxiety, asthma, heart related conditions, high blood pressure, as well as any other potential chronic health issues that could affect the participant's practical learning experience throughout the scuba course.

Kenneth Tuttle Wilhelm, SEI & PDIC Course Director, Malaysia, mentioned in the July 2016 quarterly journal of Currents, that "instructors and Dive Centres need to be proactive in screening-out potential students and current students who have acknowledged or observed medical conditions." He also stresses the importance of the qualified medical professional in reviewing the "Medical Statement and Guidelines for Recreational Diver's Physical Examination" prior to signing off and clearing the future participant for the scuba class. Unfortunately, due the lack of the proper screening process by both the medical professional and dive shop, there have been several scuba diving related deaths. These tragic incidents may have been prevented with proper screening.

Proper screening of the potential scuba diving participants, should help the instructor identify any and all pertinent information upfront. In doing so, this should aid in preventing any incidents from occurring during the practice sessions in the pool or most importantly, during the open water training dives. Taking it in prospective as a new instructor, I can identify with having

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Filling Out Medical Forms continued from page 5

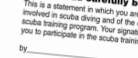
medical issues as I have Attention Deficit – Hyper Activity Disorder (ADHD). By letting all of my instructors know my medical issue, not only on my medical forms, but in person prior to the start of any scuba courses that I have taken, we have been able to work out any issues and overcome any obstacles in advance so that I could pass the courses successfully. The most important thing anyone filling out their medical forms for their prospective scuba course is to be upfront and honest.

Being honest on medical forms is not only for the diver's personal safety but for those around them as well. Daniel Nord from Alert Diver Online, states that "medical statements will likely be encountered during your diving career. Properly executed, they can be an important element of dive safety." There is no shame in listing medical history on medical forms. When a potential scuba diver class participant does not have their medical form properly and honestly filled out, it not only puts the dive center, its owners and employees (scuba Instructors/ Divemasters) at risk, but it also puts the other scuba diving participants at risk. When an incident takes place due to this, it jeopardizes the class, the dive outing, as well as can potentially ruin a reputable dive center and the people associated with it. It can also ruin what could have been a fantastic scuba diving trip! Potential scuba diving participants should not be ashamed of their personal medical histories and feel that they have to hide or lie about it on their medical forms. In my case, I am someone that struggles with ADHD, for which I have had to learn to work on by being more focused in what I was doing either recreational scuba diving with my dive partner or most importantly, engaging with new scuba diving students. Sometimes scuba diving is not an appropriate activity for those with high-risk medical concerns to participate in. Should that be the case, the participant can still enjoy snorkeling related activities in the water where the participant can have a safe and fun time with other family members and friends while also being closely monitored.


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PASC
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RSTC

MEDICAL STATEMENT
Participant Record (Confidential Information)



UNIVERSITY OF KENTUCKY
ATHLETICS

Please read carefully before signing.

This is a statement in which you are informed of some potential risks involved in sports diving and of the content required of you during the scuba training program. Your signature on this Statement is required for you to participate in the scuba training program offered

by _____ and _____

_____ Facility _____ located in the _____ state/province of _____

Read this statement prior to signing it. You must complete this entire in the Medical Questionnaire, which includes the medical questionnaire, so this Statement signed by a parent or guardian.

Diving is an exciting and demanding activity. When performed correctly, applying correct techniques, it is relatively safe. When performed incorrectly, it can be dangerous.

Dividers Medical Questionnaire

To the Participant:

The purpose of this Medical Questionnaire is to find out if you should be allowed to participate in recreational or non-recreational water diving. A positive response to a question does not necessarily mean you should not dive. A positive response means that there is a preexisting condition that may affect your safety while diving and you must seek the advice of your physician prior to engaging in diving activities.

- _____ Could you be pregnant, or are you attempting to become pregnant?
- _____ Are you presently taking prescription medications? (With the exception of birth control or anti-seizure)
- _____ Are you over 45 years of age and can swim VES1 to one of more of the following?
 - _____ currently swim a pipe, cylinder or goggles
 - _____ have a high cholesterol level
 - _____ have a family history of heart attack or stroke
 - _____ currently receiving medical care
 - _____ high blood pressure
 - _____ diabetes mellitus

Have you ever had, or do you currently by date _____

- _____ Asthma, or wheezing with coughing, or wheezing with exercise?
- _____ Frequent or severe attacks of indigestion or allergy?
- _____ Frequent colds, sinusitis or bronchitis?
- _____ Any form of diabetes?
- _____ Pneumothorax (collapsed lung)?
- _____ Other chest disease or other surgery?
- _____ Behavioral health, mental or psychological problems (panic attack, fear of closed or open spaces)?
- _____ Epilepsy, seizures, convulsions or take medications to prevent them?
- _____ Recurring complicated migraine headaches or take medications to prevent them?
- _____ Blackouts or fainting (frequent/large loss of consciousness)?
- _____ Frequent or severe suffering from motion sickness (seasick, car sick, etc.)?

The information I have provided about my medical history is accurate to the best of my knowledge. I agree to accept full responsibility for omissions regarding my failure to disclose any existing or past medical condition.

Signature _____ Date _____

Signature of Parent or Guardian _____ Date _____

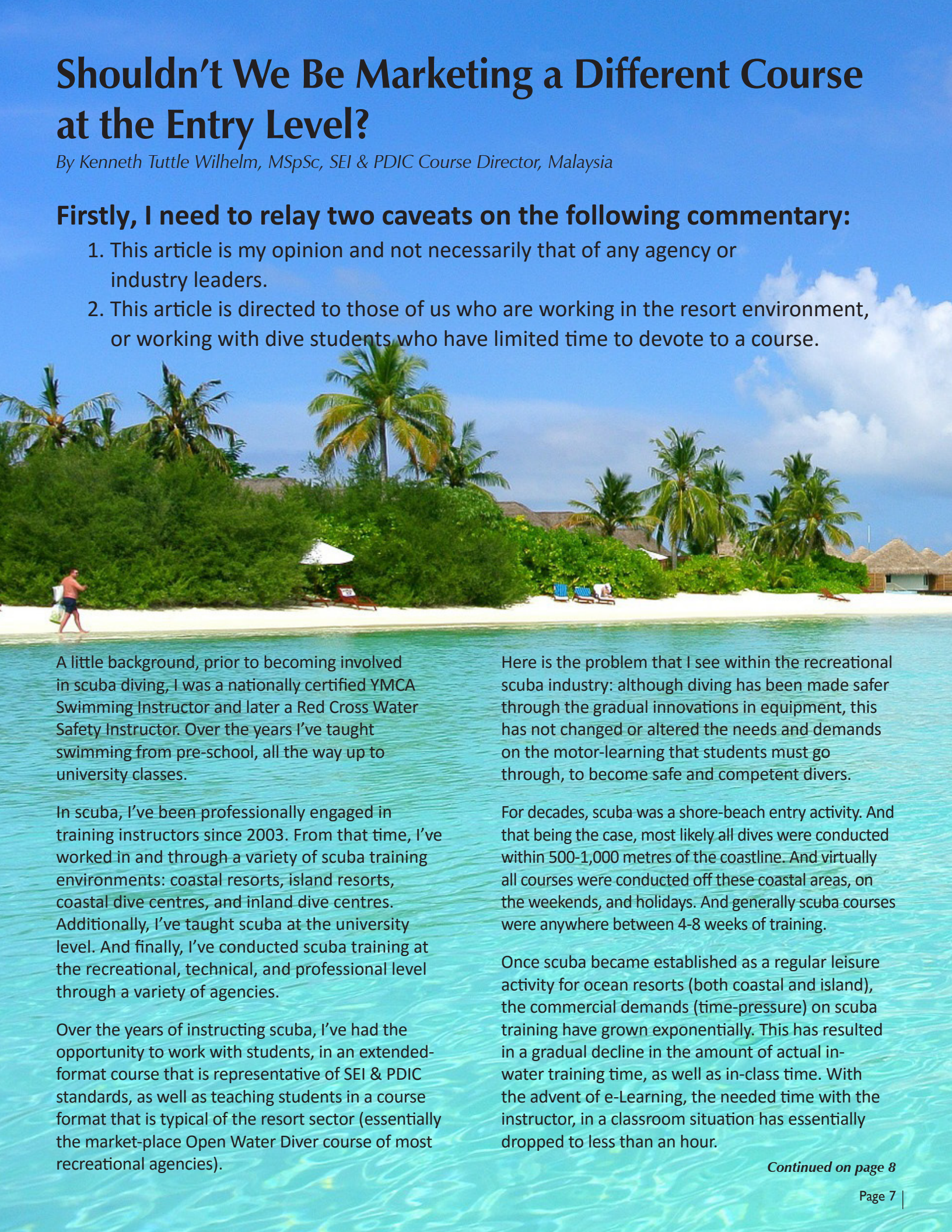
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Shouldn't We Be Marketing a Different Course at the Entry Level?

By Kenneth Tuttle Wilhelm, MSpSc, SEI & PDIC Course Director, Malaysia

Firstly, I need to relay two caveats on the following commentary:

1. This article is my opinion and not necessarily that of any agency or industry leaders.
2. This article is directed to those of us who are working in the resort environment, or working with dive students who have limited time to devote to a course.



A little background, prior to becoming involved in scuba diving, I was a nationally certified YMCA Swimming Instructor and later a Red Cross Water Safety Instructor. Over the years I've taught swimming from pre-school, all the way up to university classes.

In scuba, I've been professionally engaged in training instructors since 2003. From that time, I've worked in and through a variety of scuba training environments: coastal resorts, island resorts, coastal dive centres, and inland dive centres. Additionally, I've taught scuba at the university level. And finally, I've conducted scuba training at the recreational, technical, and professional level through a variety of agencies.

Over the years of instructing scuba, I've had the opportunity to work with students, in an extended-format course that is representative of SEI & PDIC standards, as well as teaching students in a course format that is typical of the resort sector (essentially the market-place Open Water Diver course of most recreational agencies).

Here is the problem that I see within the recreational scuba industry: although diving has been made safer through the gradual innovations in equipment, this has not changed or altered the needs and demands on the motor-learning that students must go through, to become safe and competent divers.

For decades, scuba was a shore-beach entry activity. And that being the case, most likely all dives were conducted within 500-1,000 metres of the coastline. And virtually all courses were conducted off these coastal areas, on the weekends, and holidays. And generally scuba courses were anywhere between 4-8 weeks of training.

Once scuba became established as a regular leisure activity for ocean resorts (both coastal and island), the commercial demands (time-pressure) on scuba training have grown exponentially. This has resulted in a gradual decline in the amount of actual in-water training time, as well as in-class time. With the advent of e-Learning, the needed time with the instructor, in a classroom situation has essentially dropped to less than an hour.

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Shouldn't We Be Marketing continued from page 7

Why has this happened? Why are the newly certified Open Water Divers of today, not equal to the new Open Water Divers of the early decades?

As a professional in Physical Education, a licensed swim coach, and a licensed swim instructor, I will offer my opinion that: reduced time in water training, for the average individual, will not result in attaining the level of scuba motor skills that could and should be achievable in a time-intensive programme, notwithstanding the type of equipment available.

In the past 50 years, it has not been widely observed in the species of Homo Sapiens, the evolutionary development of webbed hands, webbed feet, nor gills. Nor, have scientists noted any change in the Laws of Physics, as they apply to mammals who dive to depths in water. The use of the original scuba equipment, nor the current innovated versions, does not alter the physical realities and limitations of divers in the water.

If these two non-observations are to be construed as valid, then one wonders how the physiological challenges of diving; the real dangers of being in an environment with no ambient air available; and the need for physical strength and endurance, allied with the mental acuity to act and choose correctly for self-rescue, or rescue of

others, can adequately be ameliorated by equipment innovations?

Thus, I ask, why resort oriented training programmes, and instructors persist on offering and promoting the Open Water Diver course (ISO/EUF Level 2 Autonomous Diver), when it's quite obvious, that the reduced time available for training during will predetermine that the dive student simply cannot reach the skill competence of divers from yesteryear?

With the advent of ISO/EUF and their development of a coherent set of standards, we see that they have produced a reasonable entry level course: ISO/EUF Level 1 Supervised Diver. This Level 1 certification requires the same swimming endurance skills that are required at Level 2 (Open Water Diver), but accounts for less training time, by reducing the number of dives, and depth of knowledge content.

So here is a certification, that demands of the student the same swimming ability, but allows a student to achieve a certification within a reduced time frame.

However, with limitations. The Level 1 Supervised Diver, is limited to a maximum depth of 12 metres (40 feet), and may only dive with a certified professional.

I suggest that this is the course we, as an industry, should be marketing as the entry point to scuba diving. In particular within the resort environment, or where the student is asking for a 'short course'.



Publications and Continuing Education

As a reminder, **Currents** is your publication. Submission to **Currents** counts toward continuing education credit, so we encourage participation in this journal. Articles or information may be sent to info@seidiving.org. We prefer Word documents for articles so text can be formatted to fit the layout. Photographs, figures and illustrations should be referred to in the text and attached separately with proper labeling. Photos should be sent as JPG or PDF files at least 300 dpi. If you have any questions, please contact our office at 765.281.0600. Please scan all files and pictures for viruses before sending.

SEI & PDIC are not responsible for the views expressed in the content of the articles published. These articles are written by independent leadership members sharing their personal experiences and insights they have gained over years of teaching and scuba diving. ❖

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