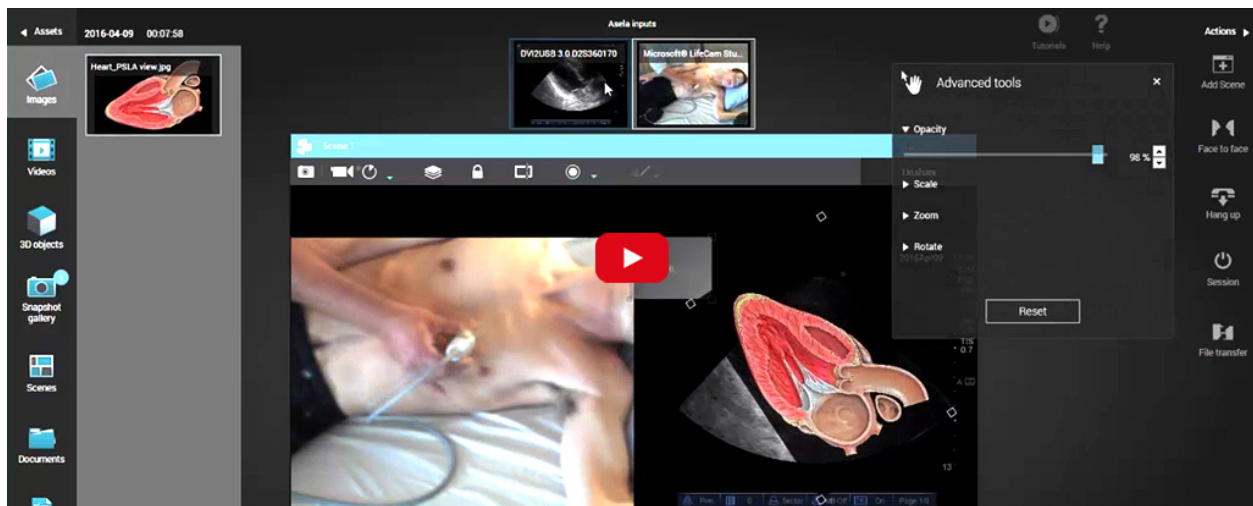




Reacts for remote ultrasound training and supervision

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Worldwide, hundreds of thousands of ultrasound users in various medical disciplines require training and/or supervision. The problem for many professionals is obtaining access to adequate, quality training, which often presents a significant bottleneck to improving care.

For the didactic portion of various trainings, more and more tools and solutions are now available in numerous formats: textbooks, e-learning, simulation, DVDs, websites, etc.

For medical procedures, getting practical training is the main problem. Not enough people are trained in the various medical centers (specifically in remote, rural centers), which results in not having enough competent trainers available for health care professionals to learn locally and “longitudinally” (i.e. continuous training over a few weeks/months to reach competency).

Various options are available to learners for practical training: seminars, workshops, self-learning, certification process, electives for a few days/weeks in specific centers, formal fellowship, as well as developing “in-house” training programs. Most of these options are however not feasible for most centers or sub-optimal for adequate individual training.



For many physicians, getting practical training or continuous education is most often the problem. In part because of time constraints, and in part because they, very often, do not have access to an adequate trainer/mentor. They often opt to acquire practical training at seminars or workshops, which usually last 1-3 days. Once learners have attended such a training program for a few days, they know more about the technique but are very far from being competent. They go back to their medical centers and often will not have access to any form of longitudinal learning necessary to gain experience, review cases, ask questions, etc., under adequate supervision. They may consequently fail to retain what they've learned during a workshop or seminar.

The end result is that learners may be sub-optimally trained, or inadequately trained without supervision. We are seeing more and more people taking short training courses and subsequently exhibiting “unconscious incompetency”, which may lead to worse outcomes than if specific medical procedures or techniques were not performed.

As mentioned in various guidelines from professional societies, specific levels of training and experience with certain numbers of cases are required to attain competency. However, the training tools to obtain the required proficiency are quite scarce, causing a major impediment to a solid, successful training scheme.

In the context of health care professionals with busy practices, it is sub-optimal to ask them to take a significant part of their time “off work” to go train at various locations over a certain period of time. It is costly, takes time, and does not ensure an adequate level of training with adequate competency.

The Reacts platform will allow experts/professionals and trainee/patients from various medical and non-medical disciplines to interact live or offline (i.e.: playback of a recorded session) for remote assistance, training, supervision, or communication.

There is great need for healthcare professionals to not only have access to adequate “episodic” training, but very importantly to **have access to “longitudinal” training**. Even though many important notions can be learned in a workshop over a couple of days, there is a need for recurrent training sessions geared towards providing the learner with practical experience at the bedside with a real machine and a real patient or model.



Learners must **have access to competent mentors**, who may not be available in their local training environments. They must also **have access to some form of continuous, interactive education** to maintain their practical skills and knowledge of bedside ultrasound.

Learners need to gather a certain number of **supervised** studies in order to learn, and also to fulfill the requirements of specific certifications. These studies must be performed by the learners but they must also be **corrected, reported, discussed**, and optimally supervised so that the learner can gain and develop adequate experience from each examination or procedure performed.

There is a **need for a form of training that is better tailored to the busy reality of health care practitioners**. Quality “**remote**” **hands-on training** through telemedicine can help provide such individual or group training, and thereby optimize the “learning delivery” while saving a significant amount of time and money. Such training must be easily repeated over time, and also needs to be available at **low cost**.

Academic medical societies and other certifying organizations require proper documentation of the number, type, and adequacy of specific examinations or procedures performed by trainees. Having a way **to receive a partial or full log book that has already been corrected and approved by a “competent” mentor** would be very important to facilitate and accelerate the certification process.

In summary, what is needed for both patients and healthcare professionals is:

Better, more efficient communication and training / Remote access to expertise / Lower cost

Reacts is the perfect solution to fulfill these needs.

- Watch video: [Remote hands on ultrasound training session between the mentor \(in Montreal\) and the trainee \(in Calgary\)](#)
- Watch video: [IIT Reacts for ultrasound education: reinvent the way you teach](#)