Geophysical Research Abstracts
Vol. 19, EGU2017-7338, 2017
EGU General Assembly 2017

Sailing for Science: on board experiences for transferring knowledge on Historical Oceanography for Future Innovation

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Smart, sustainable and inclusive Blue Growth means also knowing past technology and the paths followed by ancients in order to understand and monitor marine environments. In general, history of Science is a matter that is not enough explored and explained or promoted in high schools or university official programmes, and, usually, scientist do not consider it as an important part of their curricula. However, bad or good ideas, abandoned or forgotten beliefs, concepts, opinions, do still have a great potential for inspiring present and future scientists, no matter in which historical period they may have been formulated: they should be always be taken into consideration, critically examined and observed by a very close point of view, not just as part of the intellectual framework of some obsolete 'Cabinet of Curiosities' with limited access except for the chosen few.
Moreover, history of Science should be transmitted in a more practical way, with hands-on labs showing the limits and challenges that prior generations of ocean explorers, investigators and seafarers had to face in order to answer to crucial questions as self-orientation in open sea, understanding main currents and waves, predicting meteorological conditions for a safe navigation. Oceanography is a relatively young branch of science, and still needs further approvals and knowledge (National Science Foundation, 2000). The Scientific Dissemination Group (SDG) "La Spezia Gulf of Science" – made up by Research Centres, Schools and Cultural associations located in La Spezia (Liguria, Italy) - has a decadal experience in initiatives aimed at people and groups of people of all ages, who are keen on science or who can be guided in any case to take an interest in scientific matters (Locritani et al., 2015). Amongst the SDG activities, the tight relationship with the Historical Oceanography Society, the Italian Navy and the Naval Technical Museum (that collects a rich heritage of civilization, technology and culture witnesses, related to the naval history of seamanship from the origins up to nowadays), allowed the creation of a special educational format based on Historical Oceanography, for university and high school students as an integration for their curriculum. The Historical Oceanography Society has provided the major knowledges included in the ancient volumes of its archive, thanks to the availability of its members that also held theoretical and practical lessons during the course.
The present paper will describe the one-week special course (about 60 hours of theory and practice with technical visits to Research centres and Museums) that has been planned to be carried out on board of the Italian Training Navy Ship (A. Vespucci) and has been organized in order to give the hints about on board life, as well as theoretical lessons on modern and historical oceanography, hands-on labs on oceanographic instruments from public and private collections, physiology of diving techniques and astronomy.
The general aim of this course has been, hence, to give to excellent students all those technological but also creative and imaginative features of our past.

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