Do people have sufficient basic knowledge concerning oceans and seas?

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Very few studies have been conducted in Europe regarding the level of basic marine knowledge and education. These few studies however all indicate the very limited level of knowledge regarding Oceans and Seas and its absence in educational curricula. In 2005 the Flanders Marine Institute (BE) performed a study about the basic marine knowledge of the public. They questioned approximately 1200 secondary students and senior citizens about their knowledge and interests, and concluded that their basic comprehension about oceans and seas was insufficient. This study was taken as a starting point for two publications on how to upgrade basic knowledge of oceans and seas through secondary education. Both papers confirmed the absence of marine topics in biology lessons and its minor role in geography classes. Ocean related issues are treated as a footnote and consequently class resources are fragmented restricted to some isolated facts and illustrations in text books. To answer the question on how basic marine knowledge of the public could be upgraded through the secondary educational system, both papers offered long- and short term recommendations. Basic marine knowledge needs to be integrated in the secondary educational curricula, forcing schools to implement it in the class rooms. Since changes like that take time, a list of marine topics that could be integrated in the existing curricula and ways how to 'marinate' the content of biology and geography classes were given. These conclusions and recommendations were achieved through a focus group method implemented on students of the second and third grade, their science teachers and a board of marine researchers. First research question was whether all groups agreed on the necessity to upgrade basic marine knowledge of the public and whether it was part of their own interest. The answer was a definite overall 'yes'. Secondly the topics of their interest and necessity (in case of the researchers) were listed and evaluated, taken as a starting point for the above mentioned long- and short term recommendations and an analysis of the current biology and geography curricula was performed. At last ready-to-teach packages were developed based on these results as part of the short term solutions and a topic-list to implement in the future curricula was created, to serve as a scientific justified basis for curriculum changes.

Since these extensive and valuable studies were published in 2008 no steps towards a long-term solution were taken yet and the upgrade of basic marine knowledge of the public of the future still depends on the voluntary motivation of the individual teacher.

Seen the unquestionable importance of Oceans and Seas this lack of basic marine knowledge of Oceans and Seas of the broad public and the lack of initiative of the enforcement bodies is rather inexplicable.

References

Copejans E. and K. De Doncker. 2007. Mare incognitum De Aardrijkskunde 31(1):21-32.

Copejans E. and M. Smits. 2011. De wetenschap van de zee: over een onbekende wereldoceaan. Acco: Leuven. ISBN 978-90-334-8412-4. 175p.

Eggermont M. 2007. Upgrading basic knowledge of oceans and seas through secondary education. MSc Thesis. Universiteit Gent; MARELAC: Gent. 103p. + 1 cd-rom

Hoeberigs T and J. Seys. 2005. Wat weten we over de zee? Een onderzoek naar de kennis en informatienoden bij jongeren en senioren. De Grote Rede 14:2-5.

Seys J., N. Fockedey, E. Copejans, T. Hoeberigs and J. Mees. 2008. What does the public want to know about the sea? Exploratory analysis into the information needs of the public at large with regard to knowledge of the sea and coast. VLIZ Nota. Flanders Marine Institute (VLIZ): Oostende. 10p.