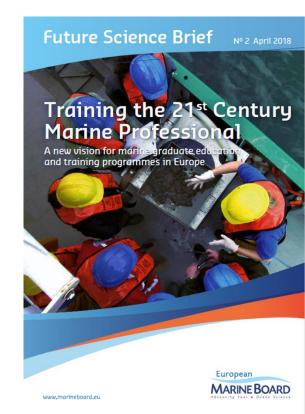


Training the 21st Century Marine Professional



Sheila Heymans Paula Kellett

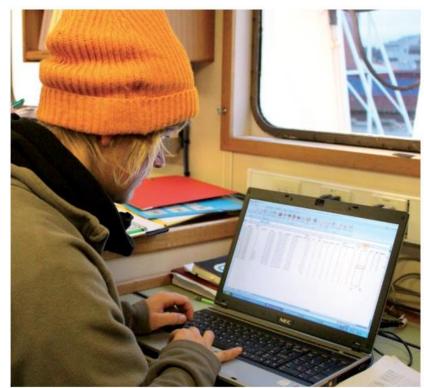
Magda Vincx, Avan Antia, Tim Deprez, Øyvind Fiksen, Marja Koski, Bev Mackenzie, Pauhla McGrane, Connor O'Carroll, Jeanine Olsen, Luis Menezes Pinheiro, Murizio Ribera d'Alcalà & Gauillaume Roullet.



Current Training Landscape



- Highly fragmented mix of specialized and general courses
- Doctoral:
 - Fundamental research
 - Advanced courses such as statistics, GIS, programming etc.
 - Transferrable skills such as scientific writing, project planning, etc.
 - Research outputs thesis
- PhD programmes need to be updated to meet the needs of society
- Use of placements, internships would foster training to better fit stakeholder needs



PhD programmes must ensure the employability of the graduate, while maintaining their

Future Training needs



 Mismatch between current training, and needs of policy and industry - Blue Economy

- Blue Growth needs:
 - Aquaculture
 - Coastal tourism
 - Marine biotechnology
 - Ocean energy
 - Seabed mining



Only a very small proportion of Masters courses include content on archeology, blue energy, coastal and marine tourism, marine planning and naval architecture

Key Targets for the Future



- Secure marine research excellence
- Create an attractive institutional environment with a clear marine branding
- Incorporate interdisciplinary research options
- Expose graduates to industry and other relevant employment sectors
- Encourage international networking and collaboration
- Build in quality assurance
- Emphasize relevant transferable skills training
- Incorporate innovative training methods
- Facilitate Continuous Professional Development

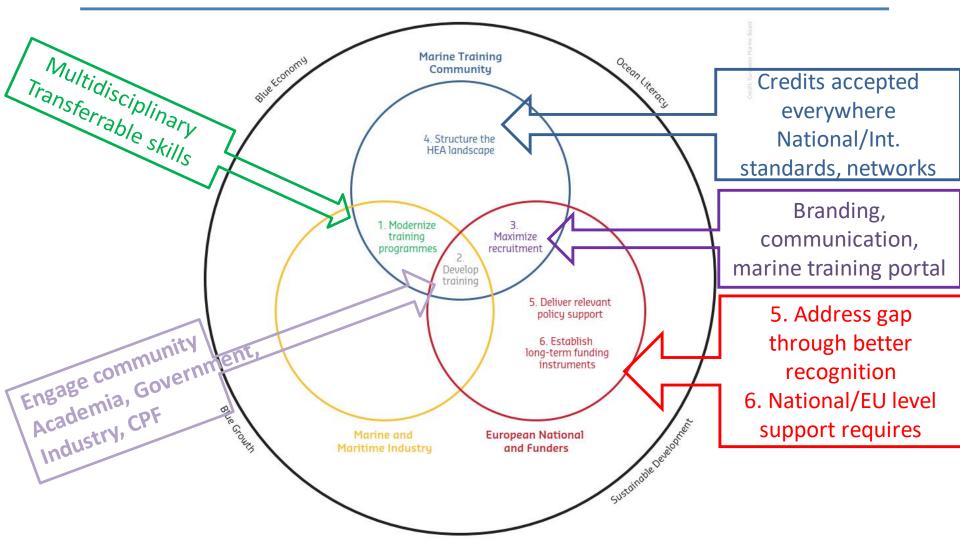


Marine training at sea is a valuable addition to a graduate's skill set, but the costs can be significant

Vincx M, et al. 2018. Training the 21st Century Marine Professional: A new vision for marine graduate education and training programmes in Europe. Kellett P, et al. [Eds.] Future Science Brief 2 of the European Marine Board, Ostend, Belgium. 47pp. http://www.marineboard.eu/publication/training-21st-century-marine-professional

Recommendations





Vincx M, et al. 2018. Training the 21st Century Marine Professional: A new vision for marine graduate education and training programmes in Europe. Kellett P, et al. [Eds.] Future Science Brief 2 of the European Marine Board, Ostend, Belgium. 47pp. http://www.marineboard.eu/publication/training-21st-century-marine-professional