

A Matter of Choice – Ocean Literacy, Marine Education, and YouTube

Albert Gerdes, Martina Pätzold, Frank Schmieder, Jana Stone, Nils Strackbein
MARUM – Center for Marine Environmental Sciences, University of Bremen

Introduction:

Communicating our knowledge of marine sciences to younger audiences can be rather challenging. Science educators are routinely faced with poorly motivated adolescent school kids. No simple magical solution to solve this problem can be given here. However, making marine science educational content a matter of choice rather than obligatory might be an effective approach in reaching out to these target audiences. Short, entertaining and informative YouTube videos that present fascinating ocean-science content might be an option to better serve the needs of younger people.



YouTube – A Success Story

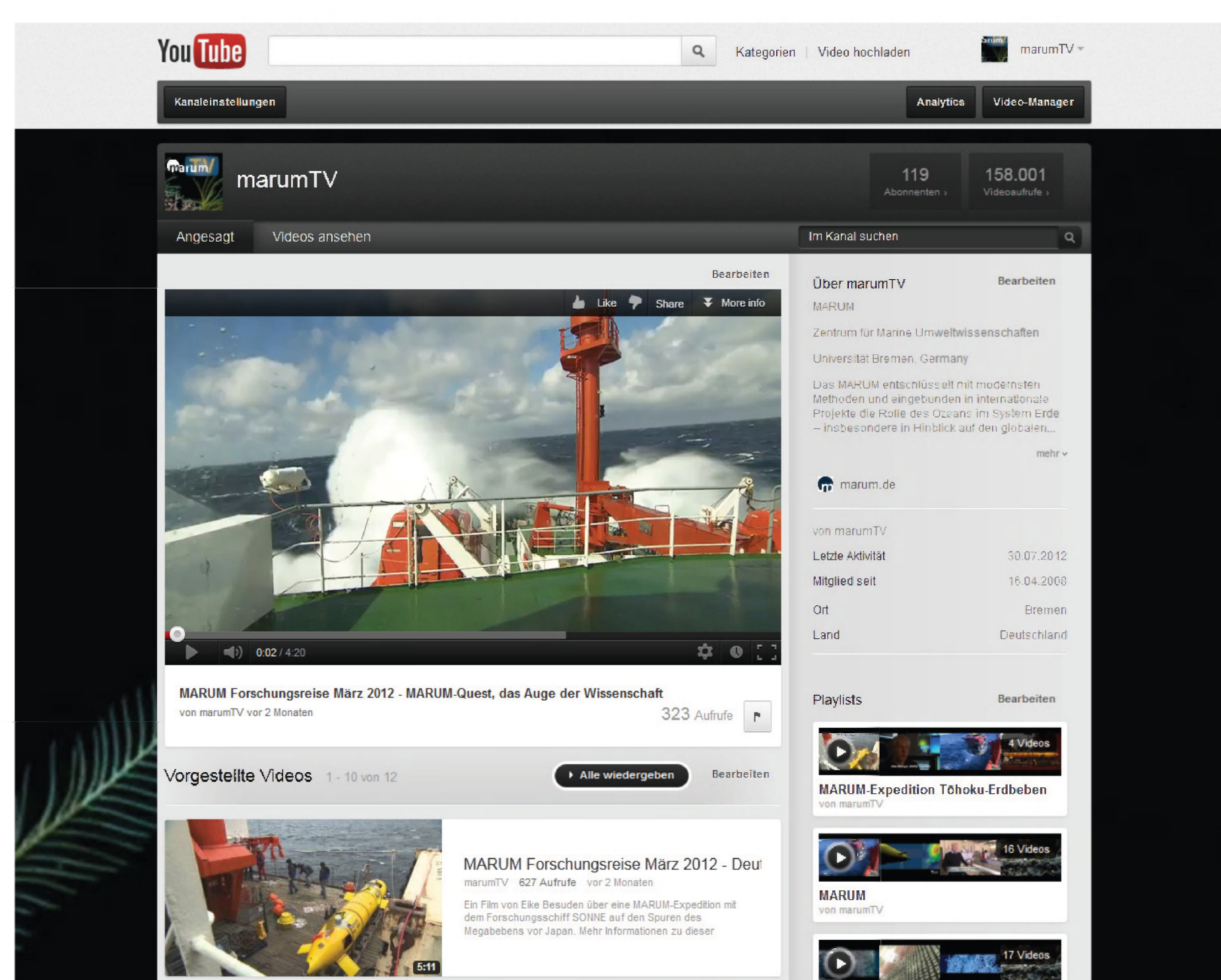
The now multilingual (54 languages) video platform YouTube was established in early 2005. In late 2006 Google purchased the start-up company. Following a redesign in early 2012 videos now can be uploaded in HQ and HD formats. The current upload rate is one hour of video material per second (!!), a tenfold increase over the 2007 rate.

Watch: www.onehourpersecond.com/#en



MARUM TV on YouTube

MARUM, the Center for Marine Environmental Sciences, University of Bremen/Germany, had already established MARUM TV and joined YouTube as early as April 2008. Currently 71 short videos of 2.5 to 7 minutes in length are available, 29 of them in both German and English. Due to legal restrictions only 59 of these videos are available on YouTube. In total ~ 150,000 views for MARUM videos have been recorded since April 2008. For individual videos the number of views ranges from a few dozen to more than 34,000.



International Marine Science

A random search for the presence of marine institutes on YouTube reveals that the levels of activity and response differ considerably.

Institution	Launching date	Uploaded videos	Cumulative views*
MBARI	05.02.2009	69	4 800 000
Woods Hole	08.10.2008	80	487 000
Scripps	08.03.2007	110	404 000
MARUM, Bremen	16.04.2008	59	150 000
Ocean Leadership	12.03.2008	168	148 000
NOCs Southampton	22.10.2008	38	27 000
VLIZ, Oostende	17.07.2009	25	4 000
NIOZ, Texel	20.06.2009	8	3 500
IMR Bergen	14.09.2010	11	3 000
AWI, Bremerhaven	11.05.2012	15	1 600
GEOMAR, Kiel	16.05.2012	12	1 600
IFREMER	no YouTube channel		

Status: August 22nd, 2012

* Numbers slightly rounded

Targeting the right audience

Compared with the “most seen” clips, science-related videos play a rather secondary role on YouTube. However, in the framework of a well-defined target audience concept, science videos can become a valuable marketing instrument for communicators:

Example 1: TV journalists and authors

MARUM receives many inquiries from TV journalists working in the field of marine education, both for general and younger audiences. When they ask for B-roll footage, the MARUM YouTube channel comes into play. Journalists can use the platform to preselect deep-sea video footage from a wide range of research topics such as cold and hot vents, cold water corals, etc., and will finally be provided with licensed HD material as desired.



Example 2: School students

Watching YouTube videos is a matter of choice. To increase the probability that younger audiences will view marine research videos and become more ocean literate, scientific institutions should look for appropriate cooperation partners. For example MARUM, as member of the German Marine Research Consortium, is currently developing a cooperative project with the German National Geographic magazine “NG Kids”. The aim is to jointly produce popular science clips for younger school kids.

