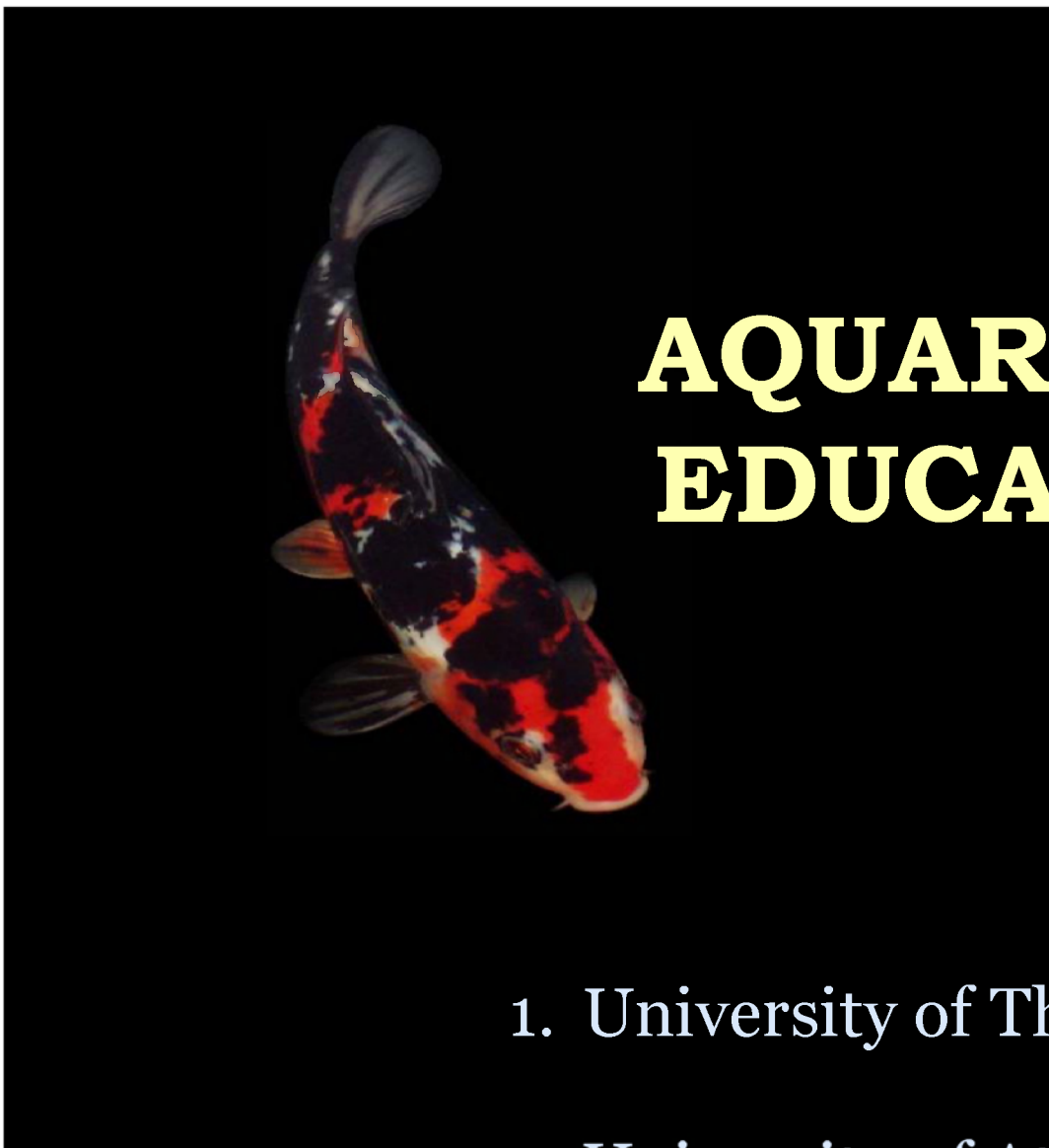

AQUAR
EDUCA
1. University of Th

IA-CLAYS AND ARCHITECT
ATIONAL TOOL FOR THE EN
OTHER RELEVANT I

Castritsi-Catharios J.[1] , Dr*

nessaly, School of Agricultural Sciences, Departmen
E-mail: cathario@biol.

URAL MODELS FORM A MO
IVIRONMENTAL EDUCATIO
HUMAN ACTIVITIES

agoti A.[2] , Zouganelis G. D[3]

t of Ichthyology and Aquatic Environment, Fytoko,V
uoa.gr and cathario@uth.g

ODERN
N AND

Volos 38446, Greece

2. University of At
3. University of Po

The aquatic envir
comprise the nucleu
management of the
use of models (aqu
teaching quality.

AQUARIA–

- ✓ *Sandpaper, Dreme*
- ✓ ***Natural Materia***
- ✓ ***Painting:*** *Acrylic*

thens, Department of Biology, Sector of Zoology and
ortsmouth, School of Biological Sciences, King Henr

onment is strongly related to the susta
is of fishing industry. Global knowledge
coastal zone. Learning of related subject
uaria-clays and architectural models)

CLAYS: MATERIALS

✓ *Plaster in form of gauze or powder, clay.*

✓ *Silver wire, fishing line, glass stirring shaft, thin carton board sheet.*

l tool, tutu, aquarium tank.

ls: *Sand, coral, stones, sponge.*

paint, varnish, primer.

l Marine Biology, Athens 15784, Greece
y I str., King Henry Building, Portsmouth PO1 2DY,

ainability of fisheries and biological fis
of the aquatic environment is a prerequ
ts can be affected with practice and stud
comprise an economical solution wit

United kingdom

h farming that both
uisite for the rational
lies on the spot. The
hout compromising

➢

dif

➢

➢ Aq

selected sectors (i

➢Types of aquac

farmed species (i.

✓ A new approac

which stimulates the

pathology).

✓ Enhance creativ

Clay Models

Morphology (pic.1) and anatomy of organ
fferent growth stages, fish pathology.
Ecosystem dioramas (pic.1).

Architectural Models

quaculture farms: the entire premises (p
i.e. growth sector).
culture according to the cultivating metho
.e. shellfish cultures).

WHY AQUARIA–CLAYS A

ch in theoretical and practical educatio
students' interest towards each subject (i.e

vity in improving an experimental idea

Pic 1: *Mediterran*

isms,

ic.2) or

d or the

Pic 2: *Architectural mode*

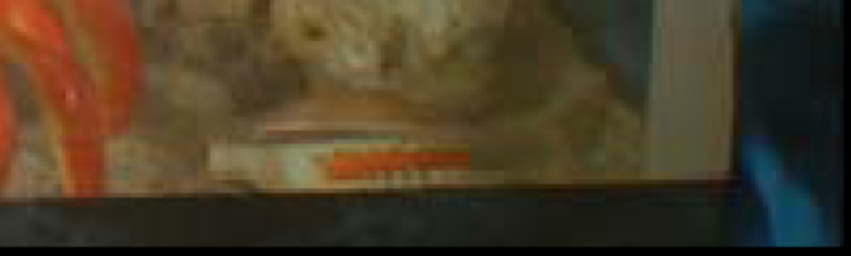
ND ARCHITECTURAL MODELS

n

e.

a,

✓ Dioramas present the differen
and ease the estimation and evaluatio
of fishing and aquaculture in the
environment overall.



ean ecosystem diorama

l of Fish farm in Preveza

t ecosystem balances
on of the consequences
coastal zone and the

developing troubles
necessary skills in fis

✓ Clay models of
to identify and mer
different organisms (
detect any pathologic

shooting strategies and trial methods
heries and aquaculture.

organisms (or parts of them) help student
norise not only the characteristics of th
(internal and external anatomy), but also t
cal signs (disease, injury, infection etc.).

Refe

Gilbert J.K., Boulter C.J. (2000) Developing models in science educ
Welch M. (1999) Analyzing the Tacit Strategies of Novice Designer

- ✓ Students will assimilate the
better, and therefore will be able to c
of aquaculture, fisheries and marine

- ✓ Low cost solution which high
demands of fisheries and aquaculture
prepared students.

rences

ation. Kluwer Academic Publishers, pp137-144, 271-2, 343, 345-348.
rs. Research in Science & Technological Education, 17:1:19 – 34.

theoretical knowledge
cope with the demands
biology.

lly meets the tutoring
e, thus leading to well-