ODS - Open Discovery Space:
How to opening up school education

Christian M. Stracke (eLC / University of Duisburg-Essen, Germany)
Elected Chair ISO PC 288, Chair CEN TC 353 & ISO-Convener SC36 for QM in LET
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Christian M. Stracke

About the speaker

- Assistant Prof., Coordinator & Team Leader, University of Duisburg-Essen
  <www.wip.uni-due.de>
- Advisory Prof., East China Normal University in Shanghai
  <http://english.ecnu.edu.cn>
- Adjunct Prof., Korea National Open University in Korea
  <www.knou.ac.kr>
- Chair of international ISO PC 288 "QM for Educational Organizations"
- Convener ISO SC36 WG5 "Quality Assurance & Descriptive Frameworks"
  <www.iso.org/jtc1/sc36>
- Chair of the European standardization committee CEN/TC 353 "IT for Learning, Education, and Training"
  <www.cen.eu/iss/TC_353>
- German SIG E-Learning in BITKOM Association: Board of Directors
  <www.bitkom.org>
- eLC - European Institute for Learning, Innovation and Cooperation,
  Director and Founder, Bonn (Germany)
  <www.elc-institute.org>
- Expert for: E-Learning, Quality, Competences, Standardization, HR

<www.wip.uni-due.de>
Selected Projects:

Competence and Skills Modelling
- act-now.eu
- WACOM
- eCOOLOL
- AgriCom
- Aristotele
- VAWI
- ODS
- ERP4STUDENTS

Open Education and Research
- OPAL
- QLET
- LoCloud
- OER
- QIEID
- ISO IEC 31500

Technology-Enhanced Learning at Large Scale

Quality Management and Evaluation
Selected Projects:

- www.erp4students.de
- www.ACT-now.de
- www.aristotele-ip.eu
- www.opendiscoveryspace.eu
- www.ecompetence.eu
- www.wacom-project.eu
- www.simbase.co
- www.agricom.eu
- www.oer-quality.org
- www.vo3r.eu
- www.oer-europe.net
- www.qed-info.de
- www.locloud.eu
- www.quality-development.eu
- www.cen.eu/issss/TC_353/
- www.sc36.org
Opening Up Education

European Commission: DG EAC and DG Connect

63% of 9 year olds are missing the digital equipment they need at school

http://ec.europa.eu/dgs/education_culture/consult/open_en.htm

OPEN DISCOVERY SPACE

A socially-powered and multilingual open learning infrastructure to boost the adoption of eLearning resources

Christian M. Stracke
University of Duisburg-Essen, Germany
christian.stracke@uni-due.de
Welcome to Open Discovery Space

OpenDiscoverySpace: Unique Resources just a click away!
• Table of Content:

1. Introducing Innovations in schools
2. Working with schools
3. ODS in my school
4. Joining ODS for Opening up Education
The only way to improve to improve September 2007

How the world is best-pearls best come off if you could define the entire task of the school system. Its role is to ensure that when a teacher enters the classroom he or she has the materials available, and she has the capability to take the more child up to the standard yesterday. And again tomorrow.
ODS Scope

*Open Discovery Space* aims to serve as an accelerator of the sharing, adoption, usage, and re-purposing of the already rich existing educational content base. First of all, it will demonstrate ways to involve school communities in innovative teaching and learning practices through the effective use of eLearning resources.

It will promote **community building** between numerous schools of Europe and empower them to use, share and exploit unique resources from a wealth of educational repositories, within meaningful Educational activities.

It will demonstrate the potential of eLearning resources to meet the educational needs of these communities, supported by European Web portal: a community-oriented social platform where teachers, pupils and parents will be able to discover, acquire, discuss and adapt eLearning resources on their topics of interest.

It will assess the impact and document the whole process into a roadmap that will include guidelines for the design and implementation of effective resource-based educational activities that could act as a reference to be adopted by stakeholders in school education.
ODS Focus

Work is focusing on:

- exploring the needs of the school communities,

- formulating teacher/ school communities that start with eMature schools/ innovative teachers and then expand to include less experienced ones,

- develop the educational design guidelines and material that will help boost the adoption of learning resources, the design of educational design templates and usage scenarios that are both focused on thematic subjects (i.e. sciences and math, social sciences, music & arts, career guidance)

- evaluate for a long time period the impact that learning activities based on digital educational content may have in these initial pilot communities.
ODS Contributions

Optimise the use & re-use of OERs

Developing a network of communities of local and regional implementations

Set up & roll out a socially-powered, multilingual portal for schools in Europe
• Table of Content:

1. Introducing Innovations in schools
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Introducing Innovation in Schools

**Institutional top-down implementation**
- Implements existing policies
- Need to convince teachers and schools
- Is limited by national resources available
- Leads to expectations of continuous financial support

**Practitioner-led bottom-up innovation**
- Builds on intrinsic teachers motivation
- Is structured on international communities of practice
- Suggest new policy developments
- Leads to service sustainability
Innovation Model

**Stimulating**
- Analyse need
- Scan the horizon
- Seek innovators
- Generate creative options

**Incubating**
- Support the leadership of change
- Broker relationships & alliances
- Create communities of practice
- Invoke Power to Innovate

**Accelerating**
- Exploit knowledge management techniques
- Synthesise evaluation & research
- Accelerate diffusion with national agencies

**Ideas for Field Trials**

**Scenarios in Action**
# Trust through Professionalism

<table>
<thead>
<tr>
<th>General Western Model</th>
<th>The Finnish System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standardisation</strong></td>
<td><strong>Flexibility and diversity</strong></td>
</tr>
<tr>
<td>Strict standards for schools, teachers, and students to guarantee the quality of outcomes.</td>
<td>School-based curriculum development, steering by information and support.</td>
</tr>
<tr>
<td><strong>Emphasis on literacy and numeracy</strong></td>
<td><strong>Emphasis on broad knowledge</strong></td>
</tr>
<tr>
<td>Basic skills in reading, writing, mathematics and science as prime targets of education reform.</td>
<td>Equal value to all aspects of individual growth and learning: personality, morality, creativity, knowledge and skills.</td>
</tr>
<tr>
<td><strong>Consequential accountability</strong></td>
<td><strong>Trust through professionalism</strong></td>
</tr>
<tr>
<td>Evaluation by inspection.</td>
<td>A culture of trust on teachers’ and headmasters’ professionalism in judging what is best for students and in reporting of progress.</td>
</tr>
</tbody>
</table>
Collaborative Learning and Community Development
Educational Design

Resources

Teacher profiles

Metadata model

Mapping Algorithm

Selected resources and tools
Learning Design Tools
The Inquiry Cycle

Hypothesis
Orientation
Experimentation
Conclusion

Example of an inquiry learning Space created by a teacher in the Go-Lab Portal

Teacher Wiki
Hypothesis Creation App
Orientation
Hypothesis
Conclusion
Experimentation
Experimentation Planning App

Interactive Web Apps aggregated for scaffolding and experimentation with online real and virtual labs

Apps from the space (only OpenSocet gadgets)

Galaxy Crash Working Tool / topkle
Dblspace scientific repository / topkle

Simulation
Real Data

Experience Planning / topkle

Control the Faulkes Telescope
Remote Control

Faulkes Telescope
Real-time Control Interface

Initial implementation of the Go-Lab Portal with Graasp

Inquiry Space

Contextual tagging and rating for easy retrieval

The objective of this space is to introduce the concept of gravity through the study of galaxy collisions to last-year of high-school students.

Interactions and Mergers of Galaxies (Chris Mihcic)

For much of the twentieth century - once the vast distances to galaxies was known - galaxies were thought to be island universes, forming and evolving in isolation with no contact between one another. In this picture, the processes which shape the galaxies we see today are uniquely determined by the initial conditions under which galaxies form and processes completely internal to the galaxies themselves.

Formation of Tidal Tails

Here we will study the formation and evolution of tidal tails, the long streamers of stars which are ejected when galaxies collide. Remember that these features are caused by a combination of gravitational tidal force and the rotation of galaxies.

What is the best parameter set?
What is 100 Hours of Remote Astronomy all about?

100 Hours of Remote Astronomy is a program to allow you to control telescopes around the world, and take pictures with them. It will be fun for all ages, you don't need any experience, and everything is free! Click here for more information about how to get started!

AVAILABLE TELESCOPES

| LIVERPOOL/SPAIN | SKINAKS/GREECE | SGAO/ISRAEL | GRAS/AUSTRALIA | ELLINOGERMANIKI AGOGI/GREECE |
| LIGHTEQUILS NEW MEXICO | LIGHTEQUILS AUSTRALIA | BELLATRIX/ITALY | MY TELESCOPE/CANADA |
What is 100 Hours of Remote Astronomy all about?

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- LIGHTBUCKETS NEW MEXICO
- LIGHTBUCKETS AUSTRALIA
- BELLATRIX/ITALY
- MY TELESCOPE/CANADA
The International Schools' Observatory (ISO) is a web-based observatory that provides schools around the world with access to professional observations from a unique robotic telescope. Provided by Liverpool John Moores University, the ISO allows students or schoolchildren from different countries to work together on science projects, make new friends and experience the excitement of science observation and discovery in exactly the same way as professional astronomers. With its 2 metre diameter mirror, the Liverpool Telescope is the world's largest fully robotic telescope. Owned and operated by Liverpool John Moores University, and sited on the world-class observatory on La Palma in the Canary Islands, it is designed to explore the way in which objects in the universe change. It can regularly monitor stars and galaxies for many astronomers every night, and can also react automatically to

**Available Telescopes**

- Liverpool/Spain
- Skinakas/Greece
- SGO/Israel
- GRAS/Australia
- EllinoGermainiki Agogi/Greece
- Lightbuckets New Mexico
- Lightbuckets Australia
- Bellatrix/Italy
- My Telescope/Canada
A map of the current sky over the telescope

What next?
If you are new to the telescope, we recommend you try 'Guided Tour' mode first.

Guided Tour
The Guided Tour takes you through a list of objects that are currently visible.

Search/Browse
The Search/Browse facility allows you to search for an object by name.

Enter RA and Dec
If you want to enter the co-ordinates of an object manually, you can do so by using this feature.

Click on a button to continue...
Faulkes Telescope: RTI Demonstration

Move the Telescope into position

FTNT/CAM  Sat Dec 17 18:54:30 2005

What next?
Type in your required telescope position in the boxes in the main panel to the left and click "Continue".

Current Position:
RA: 8h24m04s
Dec: 21°15'42"
Azimuth: 95.20°
Altitude: 72.23°
More help...

Enter the following values:
RA: 5:35:49.6
DEC: -5:13:21
Name: M42
Img Proc: Galactic

H.B. Img Proc stands for Image Processing. This option determines how the telescope processes your quicklook JPEG. This does not affect the raw data in your FITS files.

Click Continue to proceed...
Faulkes Telescope: RTI Demonstration

Moving the Telescope into position...

Live Webcam from the Telescope.

http://www.faulkes-telescope.com

The telescope is now pointing at the object you selected. Click OK to select the observation parameters.

OK

Cancel

What next?

Please wait for the telescope to slew to the required position.

Target Position:

Target RA: 5h35m30s
Target Dec: +10°21'

More help...

Instructions

A live webcam will show you the telescope slewing into position. When the telescope is pointing at the object you selected a message will notify you. If you get a time out error, this means that the telescope has taken longer than it thought to slew into position. Just click OK to continue.

Click OK to continue...
Faullkes Telescope: RTI Demonstration

1. **Filters to use:**
   - Colour
   - Colour+ND
   - Blue(B)
   - Green(V)
   - Advanced

2. **Exposure time PER FILTER:**
   - [Enter exposure time here] seconds (Colour=3 filters)
   - Planets: use a **MAXIMUM** of 0.01s in Colour, or 0.3s in Colour+ND

3. **Image size:**
   - Normal
   - 2 x 2
   - 3 x 3

4. **What next?**
   - Type in your required telescope exposure settings on the main panel and select which filters and mosaic pattern you require by clicking the white 'radio' buttons. Then click the "Make Observation" button below.

5. **Make Observation**

6. **New Object**

---

**Instructions**

Here you can select the filters you want to use during your exposure and also how long you want your exposure to be. Currently the Mosaic Feature is not available.

For a nebula, such as M42, a typical exposure would be 30 seconds with colour.

**To continue, select the Colour filter option and enter 30 seconds as the exposure time. Click Make Observation to continue...**
Observation in Progress...

Object Name: M42
RA: 5h35m50s
DEC: +51°24'24"

Please wait...
Please wait for the telescope to make the observation you have requested.
If at any time you wish to cancel the observation, please press the cancel button below. You will be taken back to the sky map where you can start a new observation.

Exposure Estimate

Current Status: The telescope is processing and downloading your colour image.

Exposure Progress:

http://www.faulkes-telescope.com
The observation has been completed. Click OK to view the image.

Click OK to continue...
User Generated Content
• Table of Content:

1. Introducing Innovations in schools
2. Working with schools
3. ODS in my school
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<table>
<thead>
<tr>
<th></th>
<th>Phase A</th>
<th>Phase B</th>
<th>Phase C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analysis of Demand and Requirements</td>
<td>Implementation</td>
<td>Validation</td>
</tr>
<tr>
<td>Number of Schools</td>
<td>100</td>
<td>600</td>
<td>2,000</td>
</tr>
<tr>
<td>Countries</td>
<td>Greece, The Netherlands, Finland, France, Germany, Austria, Italy, UK, Portugal, Latvia, Estonia, Lithuania, Belgium, Ireland, Spain, Croatia, Cyprus, Bulgaria and Denmark.</td>
<td>Greece, The Netherlands, Finland, France, Germany, Austria, Italy, UK, Portugal, Latvia, Estonia, Lithuania, Belgium, Ireland, Spain, Croatia, Cyprus, Bulgaria, Denmark, Turkey, Poland, Hungary, Romania and Serbia</td>
<td>All European countries</td>
</tr>
</tbody>
</table>
620 schools already joined ODS
The garden at the beginning
Reference to material generated during the planning of the garden

EA garden bed before planting (1)
EA garden photo during the planning phase: a ground leveled bed structure

Resource: image/jpeg
Title* EA garden bed before planting (1) English
Language* English
Description* EA garden photo during the planning phase: a ground leveled bed structure

Keyword
school garden
garden development

Structure Networked
Contribution
Role Content Provider
Entity Evi Chryssafidou
Entity Konstantinos Tassis
Date 15 July 2008

Learning
Resource Exploration
Type
Intended
End User Role Learner
Intended
End User Role Teacher

Typical Age
Range
Examples of Pilot activities proposed to Greek schools

General Introduction on ipads at Schwechat:
https://www.youtube.com/watch?v=ulvnMBVkDPA&feature=player_embedded
Connecting schools with Science Centers, using augmented reality equipment and OSR portal pathways-Finland (multiple schools). Video link: http://vimeo.com/61730727
Virtual connection with CERN - Greece, 3rd Senior High-School of Komotini
Germany, Grundschule am Homburg – An inspiring story about the role of a teacher acting as change-agent
Virtual connection between a single pupil school in the island of Gavdos (the southernmost island) with Aghios Spyridonas school in Cyprus, Nicosia-Science and Environmental Education - more coming...
Teachers’ training on Discover the Cosmos (Portugal, Lisbon and Chaves)

TED-X Kids (Portugal, Central Tejo)
Exploring the Byzantine Museum in a playful way, using tablets and material from the Collage portal (Athens)
Mobile Learning Games: COLLAGE

The Knossos scenario
The Knossos scenario was implemented at the archeological site of the Knossos palace, near Heraklion, Crete, which belongs to the Minoan civilization and culture during the Bronze Age. The design of this scenario was undertaken by history teachers from the area of Athens, Greece. Initially, the teachers collected the necessary material through books, and visited the archeological site of Knossos in previous years, direct inspection of the site was not possible, as the area was open to visitors.

As the archeological site is continuously conserved and works take place all year round, the teachers had to assess the site and took photos and video following specific itineraries, as the two history teachers have reported.

Pedagogical objectives
The teachers have identified objectives that are directly related to the school curriculum:
• The Minoans’ worship of nature through female representations
• The role of the palace as place of religious worship
• Sacred symbols of Minoan religion

The story (narrative)
In order to liven up the experience of the game the teachers came up with a story:
**Let’s share the music**

Four rural schools from remote areas participate in a multiple-site-educational scenario in which all pupils and teachers from remote schools collaborate with each other in order to create and perform a shared music web event.

http://connect.ea.gr/dmascenario1/

Photos from 1st trial connection between Norway, Greece, Cyprus (March 18, 2013)

https://streamer.uninett.no/hsh/live2.html
**Observation Weeks for the ODS Schools**

A series of observation weeks using a network of robotic telescopes for the ODS schools through the Discover the Cosmos portal. [http://www.opendiscoveryspace.eu/target-group/teachers](http://www.opendiscoveryspace.eu/target-group/teachers)

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**Eratosthenes' measurement of the Earth's Circumference**

This activity needs the cooperation of schools that are located at quite large distances between them but at the same (or almost the same) meridian (e.g. a school in Athens and a school in Helsinki). Students will measure the Earth’s circumference based on Eratosthenes’ experiment, which he carried out at 3rd century B.C. [http://www.opendiscoveryspace.eu/target-group/teachers](http://www.opendiscoveryspace.eu/target-group/teachers)
Contests for Students and Teachers

- 115 schools and 600 students got involved in the contest
Training Academies
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Primary School of Adele, Crete, Greece
myDiscoverySpace on the school website

Network of Rural Schools of Crete

Adele School Digital Library
To 12/θ Δημοτικό Σχολείο Άδελε λειτουργεί σαν ολοήμερο σχολείο με 14 τμήματα τάξεων, ένα τμήμα ένταξης και τάξη υποδοχής. Φιλοξενεί μαθητές από τα χωριά Άδελε, Μαρούλα, Αγία Παρασκευή, Πηγή, Λούτρα, Κυριάνα και Αγία Τριάδα του Δημοτικού Διαμερίσματος Αρκαδίου του Δήμου Ρεθύμνου. #Τηλ. 2831071264 #Email: mail@dimadele.org και mail@dim-adele.reth.sch.gr. #Σηλ. Διεύθυνση: Δημοτικό Σχολείο Άδελε, Άδελε, 74100, Ρέθυμνο. Πληροφορίες: Λάμπρος Καρδούνης.
myOpenDiscoverySpace of the Rural Schools Network

This portal gives access to information about projects which have been found by the RuraLEARN network to operate, directly or indirectly, in the cross-section of two fields: lifelong learning and rural development. For more information about RuraLEARN and the theme of lifelong learning as a vehicle for development in rural Crete.
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ODS @ LINQ

The leading European and international Conference on Learning INnovations & Quality

www.learning-innovations.eu
Our Vision:
Open Learning for best future Learning Innovation and Learning Quality!

Please use: #LINQ2013
Follow: @LINQ_Conference
Our Vision:
Open Learning for best
Future Learning Innovation
and Learning Quality!
LINQ 2014

7th - 9th May 2014 on Crete, Greece

In conjunction with EIF 2014:
Join the debate!
You are most welcome!

www.learning-innovations.eu

Please use: #LINQ2014
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LINQ & EIF 2014

ODS presence and contributions:
- 6th May 2014: ODS Creativity Fest
- 7th May 2014: Pre-conference day
- Conference partner (visible by logo)
- Submitted ODS impact paper

www.learning-innovations.eu
LINQ & EIF 2014

7th May 2014: ODS Workshop!

Session A: ODS and the Opening Up Education Initiative (10.00-13.00)

1. The Opening Up Education Initiative
2. Digital Learning: A priority for the Greek Presidency of the EU (Greek Ministry of Education, tbc)
3. Fostering Innovation in European Schools by ODS
4. Inquiry-based and Informal Learning in Schools

www.learning-innovations.eu

Please use: #LINQ2014
Follow: @LINQ_Conference
7th May 2014: ODS Workshop!
Session A: ODS & the Opening Up Education Initiative (10.00-13.00 - continued)
5. Local Online Collaboration and Communities: Exploring the ODS Gateway of Teachers
6. Lessons Learnt in 600 European Schools: The Second Pilot Phase of ODS project
7. Quality of Open Education and OERs in Schools

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Please use: #LINQ2014
Follow: @LINQ_Conference
7th May 2014: ODS Workshop!

Session B: ODS in Greece and Cyprus (14.00-17.00)

1. European, Regional and Local Implementation Efforts: ODS in Greece and in Cyprus
2. Success Stories from Greece and Cyprus
3. The ODS Rural School Network
4. Open Discussion and Collection of Teachers' Needs and Wishes – Plans for Future Improvements

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LINQ & EIF 2014

7th May 2014: Pre-conference day
8th May 2014: Conference day 1
9th May 2014: Conference day 2

Keynotes from MIT, OECD, ECNU, EC

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LINQ & EIF 2014

Let us discuss Opening up Education!

Registration is open now!

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Follow: @LINQ_Conference
LINQ conference

All LINQ results are available online as OERs of course!

www.learning-innovations.eu
ODS website: www.opendiscoveryspace.eu
## Communities on the ODS Portal

### Most Popular Communities

#### Greece
**Title:** Πρόγραμμα για τη Σχολική Καινοτομία
**Description:** Το Πρόγραμμα για τη Σχολική Καινοτομία συμβάλλει στην αναβάθμιση του εκπαιδευτικού έργου στην Ελληνική σχολή. Το Πρόγραμμα έρχεται να συνεχίσει και επεκτείνει το έργο του.

#### Serbia
**Title:** Srpska ODS zajednica
**Description:** Zajednica nastavnika škola iz Srbije uključenih u realizaciju ODS-projekta

#### Greece
**Title:** Easy Java Simulations for Inquiry Based Learning in STEM Disciplines
**Description:** In almost all the reform-based documents, models have consistently been recognized as one of the major unifying ideas that transcend disciplinary boundaries and pervade all scientific...

#### Change-agents' Community
**Description:** Welcome to the Change-agents' community! It is addressed to the teachers who are acting as change agents in their respective fields.

### Most Recent Communities

#### Greece
**Title:** Πρόγραμμα για τη Σχολική Καινοτομία
**Description:** Το Πρόγραμμα για τη Σχολική Καινοτομία συμβάλλει στην αναβάθμιση του εκπαιδευτικού έργου στην Ελληνική σχολή. Το Πρόγραμμα έρχεται να συνεχίσει και επεκτείνει το έργο του.

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---

### Search the ODS Communities

- **Country:**
- **Search the ODS Communities using the title:**
- **Community Theme:**
- **Apply**

---

**Countries:**
- Greece
- Serbia
- Greece

**Titles:**
- Πρόγραμμα για τη Σχολική Καινοτομία
- Srpska ODS zajednica
- Easy Java Simulations for Inquiry Based Learning in STEM Disciplines
- Change-agents' Community

**Descriptions:**
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- Zajednica nastavnika škola iz Srbije uključenih u realizaciju ODS-projekta
- In almost all the reform-based documents, models have consistently been recognized as one of the major unifying ideas that transcend disciplinary boundaries and pervade all scientific,...
- Welcome to the Change-agents' community! It is addressed to the teachers who are acting as change agents in their respective fields.

**Views:**
- 459
- 174
- 170
- 87
Transforming the mind-set of the organization: an owner’s manual

Abstract not available 4 /var/odsharvestedRepositories/old/OPENSOUT_ HEALTHY/4.xml View

Resource Τελήρη, Ιούλιος 27, 2011- 02:00 Educational Object OpenScout Yes ... ...

KeyToNature / Dryades Character page 8117_27

Flower pedicels shorter than the subtending leaf. Sepals > 7 mm ▶ Blütenstiele kürzer als das Tragblatt. Kelchblätter > 7 mm; Flower pedicels much longer than the subtending leaf. Sepals < 7

Lamium amplexicaule L.

Fotografia scattata in , , in data: ... ...

Anthemis secundiramea Biv.

Fotografia scattata in , , in data: ... ...

Aster alpinus L. subsp. alpinus

Fotografia scattata in , , in data: ... ...
Open Discovery Space:
Opening Up Education & Innovation in Schools
• Involving >2000 schools & >10000 teachers
• Optimise the use & re-use of OERs
• Implementing a network of communities
• Set up & roll out a socially-powered, multilingual portal for schools in Europe
www.opendiscoveryspace.eu

Welcome to Open Discovery Space

OpenDiscoverySpace: Unique Resources just a click away!

Contact:
Christian M. Stracke (UDE)
christian.stracke@uni-due.de
Towards Open Learning

Let us Opening up Learning, Education and Training for ALL!
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2. Working with schools
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4. Quality and impact for Open Education
QM Plan and Activities

Classification of QM/RA Tools in ODS:

Organizational Levels vs. Project Phases

Strategic
Tactical
Operative

Analysis/Planning
Development/Production
Evaluation/Revision
Classification of QM/RA Tools in ODS: Organizational Levels vs. Project Phases

Organizational Levels

Project Phases

Analysis/Planning

Strategic Level: relation project/consortium (support of project management)

- Tool: DoW check
  - Purpose of Tool: QM & RA
  - Context: analyze DPD/ORD vs. DoW
  - Contributor: QM team
  - Activity: analysis of controversies
  - To be conducted: 1st year

Tactical Level: WPs contribution to project objective (assurance/improvement of outcomes)

- Tool: Deliverable Relationships Diagram
  - Purpose of Tool: preparation DP
  - Context: describe deliverable interrelations
  - Activity: analyze DoW, comprehensiveness
  - Contributor: WP leaders & contributors
  - To be conducted: once after start of ODS

Operative Level: activities within WP (production support)

- Tool: Deliverable Planning Diagram (DPD)
  - Purpose of Tool: input for DPM
  - Context: foster structured planning
  - Activity: informal activities planning
  - Contributor: WP leaders & contributors
  - To be conducted: once deliverable starts

Development/Production

Analysis/Planning

Strategic Level: relation project/consortium (support of project management)

- Tool: General Risk Assessment Questionnaire
  - Purpose of Tool: RA
  - Context: project on general level
  - Activity: share risk awareness
  - Contributor: all ODS partners
  - To be conducted: every 6 months

Tactical Level: WPs contribution to project objective (assurance/improvement of outcomes)

- Tool: Deliverable Relationship Matrix
  - Purpose of Tool: comm. platform interrelations
  - Context: interim products exchange
  - Activity: evaluation of DRDs
  - Contributor: QM team
  - To be conducted: after DRDs are completed

Operative Level: activities within WP (production support)

- Tool: Special Risk Assessment Questionnaire
  - Purpose of Tool: RA
  - Context: deliverable production
  - Activity: share risk awareness
  - Contributor: all WP contributors
  - To be conducted: every month deliv. runtime

Evaluation/Revision/Implementation

Analysis/Planning

Strategic Level: relation project/consortium (support of project management)

- Tool: Delphi Study Improvement Potential
  - Purpose of Tool: QM
  - Context: project improvement
  - Activity: evaluate results from SWOT
  - Contributor: all ODS partners
  - To be conducted: after SWOT analysis

Tactical Level: WPs contribution to project objective (assurance/improvement of outcomes)

- Tool: Deliverable Progress Monitoring (DPM)
  - Purpose of Tool: QM & RA
  - Context: deliverable production
  - Activity: evaluate deliverable progress acc. DP
  - Contributor: WP leaders
  - To be conducted: every month deliv. runtime

Operative Level: activities within WP (production support)

- Tool: Critical Aspects Monitoring Template
  - Purpose of Tool: RA (ensure workflow)
  - Context: deliverable production
  - Activity: monitoring of critical aspects
  - Contributor: WP leaders
  - To be conducted: every month deliv. runtime

Evaluation/Revision/Implementation

Strategic Level: relation project/consortium (support of project management)

- Tool: Meeting Questionnaire
  - Purpose of Tool: QM
  - Context: consortium & cluster meetings
  - Activity: share experiences
  - Contributor: all ODS partners
  - To be conducted: after every f-2-f meeting

- Tool: SWOT Analysis
  - Purpose of Tool: QM & RA
  - Context: project improvement
  - Activity: analysis of project S, W, O, & T
  - Contributor: all ODS partners
  - To be conducted: earliest M6

Tactical Level: WPs contribution to project objective (assurance/improvement of outcomes)

- Tool: Deliverable Final Review Template
  - Purpose of Tool: QM
  - Context: external review of formal characteristics
  - Activity: self analysis of deliv. quality
  - Contributor: 2 selected partners
  - To be conducted: 1 month before delivery

Operative Level: activities within WP (production support)

- Tool: Deliverable Content Review Template
  - Purpose of Tool: QM
  - Context: deliverable production
  - Activity: optional on demand
  - Contributor: WP internal (WP leaders organize)
  - To be conducted: during production cycle (optional), latest before delivering

- Tool: Software Testing Report Template
  - Purpose of Tool: QM
  - Context: software quality assurance
  - Activity: Production internal assessment
  - Contributor: WP internal (WP leaders organize)
  - To be conducted: during production cycle (optional), latest before delivering