



Theme 2

WOMEN/YOUTH AND THE SEA PROGRAMME

**Wednesday 7th November
(Parallel Session - afternoon)**

Chair: Raja Rajagopalan
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IOI-KIDS: A web-based learning resource on the sea for children and youth

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Abstract

IOI-Kids (www.ioikids.net) is a dedicated website about the sea for school children and youngsters which provides an avenue for presenting knowledge on the marine environment in an appealing form, though the use of interactive games, fora, surveys and informative articles. IOI-Kids also seeks to encourage children, youth and teachers to exchange ideas, projects and experiences with their friends and others across the world.

The project is an initiative of the IOI-Malta Operational Centre and builds upon the participation of a number of IOI Centres representing several regions (Mediterranean Sea, Europe, Africa, Australasia) to run together this outreach programme within the framework of the Women, Youth and the Sea Programme. A main aim is to promote the IOI mission primarily with children, youth and their educators through awareness, learning and interactive projects.

Following the launch of the website, the project's chief objective is to encourage primary and secondary students and teachers to contribute actively to the website through submission of projects, news items, lessons and other informative resources relating to the sea. Interactive and common activities, such as online fora and surveys, are also planned to promote educational and cross-cultural exchange between children and educators from all partner countries.

The presentation will highlight the importance of this educational tool and outline the concept, aims, objectives and deliverables of the project. The audience will then be taken on a visual tour of the website. The partner websites launched to date will also be presented.

Introduction

IOI-Kids is a dedicated website on the sea for children, youth, community groups and teachers across the world aiming to share ideas, projects, common issues and experiences with the scope of enhancing knowledge and promoting awareness on the marine environment with the younger generations. This initiative originates from an idea of the author and has been developed under the IOI programme '*Women, Youth and the Sea*'. The project has the ambition to grow into a system-wide activity of the IOI involving a wide group of collaborating IOI Centres.



Fig. 1: FrontPage and banner of the IOI-Kids website

IOI-Kids is an innovative outreach interface that uses the internet as a medium and avenue for presenting knowledge on the marine environment in an appealing form, through the use of interactive games, fora, surveys and informative featured articles.

As more content builds up, the website is expected to reach the second important goal as a marine knowledge resource area and warehouse for young viewers, serving individuals seeking to know more about the sea, for teachers sharing information, notes and projects to sustain their school curricula, and school pupils who need additional references for their projects.

Moreover, IOI-Kids targets to develop as a space for virtual dialogue and for educational and cross-cultural exchanges. This more demanding target is intended to promote the website as a facility to undertake joint activities remotely between schools, to provide a base for inter-school collaborative projects, to promote online exchanges between students including web tutorships, as well as to serve online discussion groups, and support online competitions, newsgroups and community undertakings.

The IOI-Kids platform is intended to be developed upon a dynamic content management system that allows publishing of material from other partner IOI Centres as well as individual and group contributors. Presently the website links to two partner websites, namely those of IOI Slovenia and IOI South Africa. With further funding, the number of partners to the project is expected to increase. As the website grows and gains popularity, it is expected to attract sponsorships that can render the activity self-sustaining.

Background and Justification

The mysteries and beauty of the sea, and the creatures that inhabit it are one realization of nature that is not easily accessible to the inquisitive eyes and mind of children as much as the more tangible land environment that can be touched and experienced in their everyday life. As the saying goes, distance from sight may dissipate even the strongest passion. How many of us do not even have an idea of the habits and habitats of the fish that we eat, who stumble when



children ask why the sea is salty or why its colour is blue? It is by no means a trifle task that of bringing our younger generations to grips with the fascinating facts about the oceans and underwater life, and to tell the story of its might albeit the vulnerability to human pollution and uncontrolled exploitation. It is a noble act that of playing the tunes of the sea to our children, and indeed an investment towards the safeguarding of this common heritage through enhanced apprehension and appreciation. On the other hand, we all know how frustrating it is to open school textbooks and find so little about the sea, and how often such topics are disregarded or taught as an extra and sideline curriculum activity. How often do we remember our teachers, in our childhood schooldays, taking us on outings in the countryside or on cultural visits, and yet never bothering to let us feel the sea currents, count the sea waves and watch the creatures on a fieldwork exercise on the coast.

IOI-Kids is precisely targeting to narrow down and fill this gap in the level of apprehension on the sea by children and youth, through the use of a most friendly technology to pupils and youngsters, namely the internet, to animate knowledge about the sea on the computer monitors in their homes, and touch their minds with colourful games and informative online activities that offer them an interactive learning experience while they play. This is the primary concept and driver of the IOI-Kids website in its current shape, that is, to raise awareness with the younger generations about the sea and life in the marine environment, and to make knowledge easily understandable and channeled in a most child-friendly and attractive way.

On the local scene it is known that the younger generations of the Maltese Islands are faced with a general lack of knowledge on the marine environment. Facts about the sea are more fashionably apprehended away from the classroom. This is not expected of a country that is surrounded by the sea and is by tradition considered to be a maritime nation. Such a situation is more eloquent in larger countries, especially in communities that live more distant from the sea. On the other hand, the empowerment of children and youngsters with a solid base of knowledge on the sea is the precursor to their understanding of sea-related challenges, and certainly leads to their active participation in tackling issues connected to the sea. Admittedly, there has been recently more attention dedicated to environmental and ocean affairs by school curricula, but this is still not enough. Teachers and students need to go beyond the provisions of current school curricula and traditional methods to enrich their knowledge and raise awareness, which is what the resources of the IOI-Kids website seek to give. This is a primary incentive of the IOI-Kids project, namely to educate and raise awareness on marine and coastal issues, and to encourage dialogue, expression and action among primary and secondary school children and educators, at both the local and international levels.

Objectives and Targeted Outcomes:

The Malta Declaration emanating from the 32nd *Pacem In Maribus* conference, held in Malta in November 2007, and more specifically the recommendations made at the Youth Ocean Forum organized within the conference, speak loudly about the mobilization of the creative energies of youth for the protection of the marine environment, to move beyond the narrow circles of ocean professionals or stakeholders to broader publics, whose knowledge and understanding are key to the support of sound ocean policy, and to change perceptions and heighten appreciation for the value of the oceans and its importance to our lives and future, especially among youth.

In the conference session on *Education, Training and Communications toward the Sustainable Use of the Ocean*, the concept of an educational program that tackles the marine realm holistically was promoted as conducive to responsible citizenship and informed viewpoints by the public. Governments were urged to enhance basic education programs about the oceans for all children (and citizens in general), including natural disasters, human impact, ecosystems, oceanography and global warming, and to provide opportunities for direct contact experiences with the ocean in combination with ocean education and training towards a holistic educational and awareness raising approach to ocean heritage preservation. The use of the worldwide web offers the best vehicle to promote communication between schools, especially between those in coastal regions and those in the inland areas, whereby children who may never have come in contact with the sea may experience it through the eyes of their peers. The use of visual media is a key element in the creation of a form of distance education, awareness raising and the



communication of ocean issues, especially to children and communities that cannot experience the sea directly.

This is precisely the scope and basis of the IOI-Kids initiative which seeks to primarily raise awareness about the sea among the younger generations, and to emphasize more on sea-related topics in school curricula. This fits a key mission of the International Ocean Institute to bring the younger generations closer to the oceans. IOI-Kids targets to educate the younger generation to adopt an informed and forward-looking approach to the oceans, and encourages them to participate in common activities with a focus on the sea.

It also seeks to provide resources of information on the sea, specifically for the younger viewers, and teaching aids for teachers

As IOI-Kids will continue to evolve, its great potential as a virtual resource and space for information exchange about the sea will further emerge. The project contributes to school curricula by means of dedicated tutorials, notes and clips; it provides a warehouse of additional information upon which curriculum sea-related topics can be set up or elaborated. As its content builds up, it is expected to attract the attention of teachers as an extra to school books and as a facility where they can add to their notes as well as post their didactic material and share with other colleagues across schools and across countries. The intention is to promote the piling up of content on the website directly by the users themselves, namely through contributions by teachers who wish to share their lesson notes, as well as by students that are keen to publish their projects.

Moreover, IOI-Kids provides a web framework and prolific medium for kids and educators to exchange opinions, share ideas, projects and experiences, and to join in virtual dialogue on topics relating to the marine environment. This functionality will be facilitated in the future by further developing the IOI-Kids website in line with state-of-the-art web technology, that enables direct inputs of content by the users such as through the forum space, or through the conduction of online surveys. This will promote interaction between teachers, between students and between schools.

In addition the IOI-Kids project has the ambition to further grow into an IOI system-wide initiative that embraces many IOI centres. The initiative serves to strengthen the IOI network by bringing together focal centres in different regions to work together in a common and cross-cutting joint initiative, through complimentary contributions and cross-sharing of ideas and activities. It serves as a means of bringing capacities and contributions from many IOI centres together within a common framework and shared goals. It moreover puts in motion the great thrust and potential that the IOI network possesses, and prepares the way to extend the initiative to more ambitious goals in the future.

Achievements and Outcomes

In its first phase the project saw the setting up and launching of the IOI-Kids website. This consisted in the development of the web environment to accommodate the various ideas and to provide a framework to host the key initial online components. Special attention was dedicated to rubberstamp a brand design that attracts the attention of youngsters, and to initiate the leisure sections in the form of innovative, instructive, colourful and eye-catching online games and quizzes.

Each of these games is linked to a marine theme, providing instructive material to the viewer while playing. Typical examples are two '*Matching Pairs*' games, based on pictures and short accompanying notes on: (i) fish in the Maltese coastal sea; and (ii) marine instruments and methods used to undertake underwater observations. The '*Eels & Ladders*' game is adapted from the famous '*Snakes & Ladders*' board game; it is played online, linking to interesting snapshot notes on positive and negative fishing practices as a moving piece on the board goes up a ladder or slips down an eel.

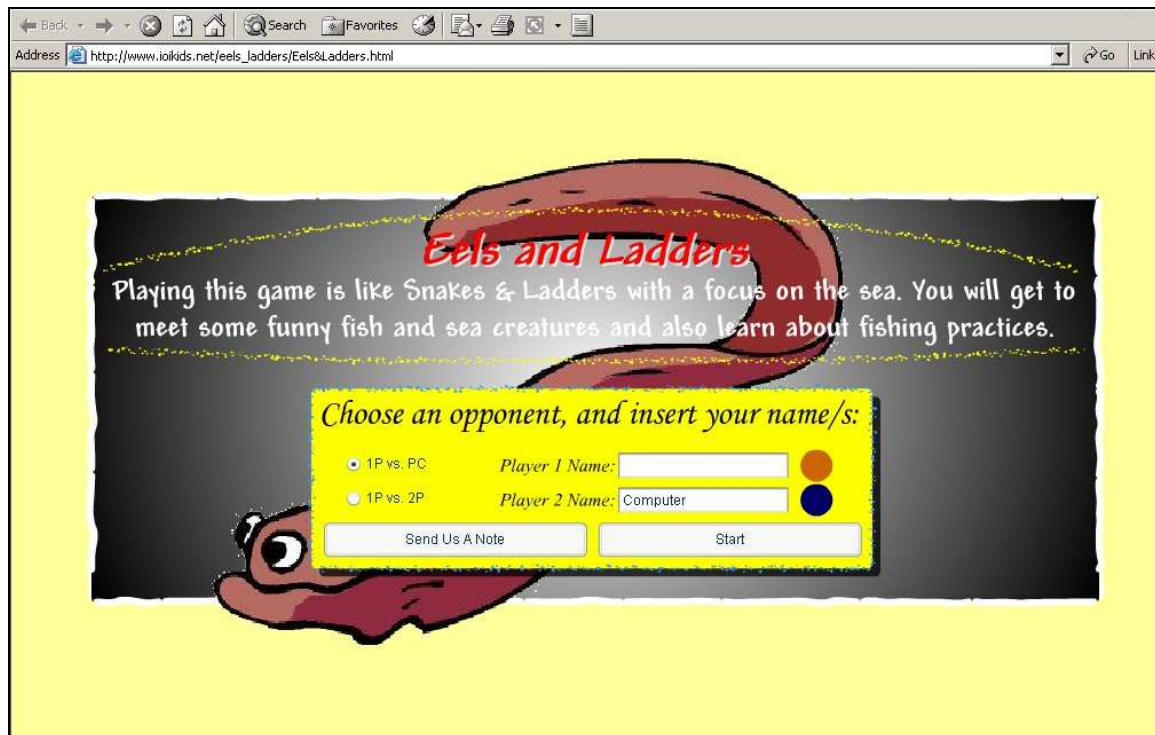


Fig. 2: The Eels & Ladders game



Fig. 3: An online quiz about the bays of the Maltese Islands

Two sections were also developed by two IOI partner centres, namely IOI-Slovenia and IOI-South Africa. The former is written in the native language of the country and targets the multinational audience that IOI-Kids wishes to attract. They are both self-contained components which, however, fit to the overall scope of IOI-Kids.



Fig. 4: The IOI Kids Slovenia website



Fig. 5: The IOI-Kids South Africa website

In this phase, the most effective boost to the website came in 2006, through online voting for an Artworks Competition that was organized by IOI-MOC. A selection of artworks shortlisted for the final contest were placed online and viewers were enabled to vote their preferred artworks while having the opportunity to access and get introduced to the IOI-Kids website. This attracted a very large number of visitors during the one month period of online voting.

The second phase of the project started in May 2007. It builds upon the existing framework to further populate the website. More specifically IOI-Kids2 has three principal targets:



- a) to continue the development of the current sections of the IOI-Kids website, with stronger participation of the present IOI Centres involved, and with the inclusion of new partners;
- b) to further promote the potential of the IOI-Kids website as a resource for educational and cross-cultural exchanges; and
- c) to establish activities within IOI-Kids and through the facilities therein to strengthen the common use of the system across a number of IOI Centres, such as by having common fora, competitions and other interactive activities.

During Phase II of the project, outreach activities in schools were initiated by direct contact and visits to schools, science weeks, youth clubs, summer schools and day-centres for children. Teachers are also being approached to introduce IOI-Kids to their students and to encourage them to use the website as a resource, and to post in their contributions. Thematic competitions are being organized as well to incentivate children to contribute to IOI-Kids. Other IOI Centres are expected to join in this second phase.

Main Elements of IOI-KIDS

The IOI-Kids website is organized to enable easy access to its various components from different entry points. Its main elements can be classified under three main headings:

Learning through fun experience

Presenting knowledge on the marine environment through:

- Online lessons;
- News items;
- Audio and video clips;
- Fora and surveys;
- Interactive games, and
- Informative articles

The IOI-Kids Team

Providing a facility for the direct involvement of kids from primary and secondary schools to:

- Create webpages to share with others;
- Write articles and news items;
- Inform others of activities and events;
- Participate in online fora and surveys;
- Interact with other kids across the globe;
- Participate in thematic competitions, and
- Team up with their friends to work together on projects

A Teacher's Resource

- Providing teachers with additional material to enrich their lessons, in line with national curricula, and
- Encouraging experts and educators in marine and environment-related fields to submit resources for online publication to share with other teachers and students.

In its current shape, the website is composed of the following key sections:

IOI-Kids Games and Quizzes: Basic knowledge on the marine environment is presented in an appealing way to children through interactive games and quizzes. A number of games and quizzes are already online. Others are being planned and will be launched in 2008.

Info 4 Kids: An educational web resource about the sea for both kids and educators. It offers online lessons, special notes and articles that complement school curricula, and articles to raise awareness on marine-related issues. Educators, experts on marine and coastal affairs, writers and representatives of educational, environmental and other organizations are encouraged to

contribute to this section. A section written in the Maltese language on ships and seafarers is already online. Other informative contributions in the form of short lectures and notes are in the process of being finalized and will be launched in 2008.

IOI-Kids News: A dedicated section for the publication of news items about the sea and notifications on events and activities. It links to useful adverts and alerts that kids should be aware of, or about which they would be interested to learn in more detail. Children, youngsters and educators may also contribute their own news items. Children are urged to join the IOI-Kids News Team and become young journalists on maritime affairs, by contributing their own stories to this section. They are encouraged to use their investigative and research abilities and write news items relating to marine and coastal issues of a local, national, regional or global nature. Some news items, together with related audio and video clips, are already online and more will be added over the coming months.



Fig. 6: The IOI-Kids News page

IOI-Kids International: This section links to partner websites. So far two partner websites (IOI Slovenia and IOI South Africa) have been launched. Other contributions are expected in 2008.

Useful Links: Links to websites offering further information and resources related to the marine and coastal environment. A number of links are already online.

About IOI: Introduces the IOI mission to all visitors of the website.

IOI-Kids Projects: Intended to provide a web space where kids can share their projects or special reports on the sea with others through online publishing. It is dedicated to the publication of kids' projects, including web pages, write-ups, drawings and other artworks, posters and messages, stories and poems, all relating to the marine environment. This is an opportunity for children to use their creativity, see their work published online and pass on messages about the sea to other kids. In summer 2007, a campaign was launched amongst children's summer clubs, and a number of contributions in the form of drawings and messages about the sea were received. Further outreach among schools and in the local media will help attract more contributions.

Some sections of the website are still under development, namely:

IOI-Kids Opinion: A space where kids and educators can voice their thoughts and exchange views about marine affairs and a variety of topics related to the marine and coastal environment as well as to related studies. This section is intended to promote intercultural and cross-cultural exchanges and experiences



through online fora and surveys. The design of this section is being developed and will be launched in 2008.

Several visitors browse through the IOI-Kids website. Periods of peak access coincide with thematic competitions urging viewers to use the website to vote online or to refer to the website content to answer competition questions appearing in the print media. This has functioned well to introduce the website to new viewers.

Future plans

The IOI-Kids concept is an innovative and modern means of promoting awareness and knowledge-sharing about the sea with the younger generations. It uses the popular internet medium that is becoming easily accessible to all social classes and to the remotest corners of the globe, thus opening the way to a very large audience and reaching widely diverse cultures. As web technology becomes more affordable and powerful, IOI-Kids will take advantage of more sophisticated tools to present material in more appealing shapes to viewers.

Even with the modest resources made available so far, the website has already gained considerable popularity and gained recognition for its scope. No doubt that it has to compete with existing state-of-the-art online kid's corners and web attractions, such as those supported by Cartoon Network and other big brand names that offer sophisticated animations and top graphic displays that are not easy to match. However, it is the content which should primarily distinguish IOI-Kids at this stage. As IOI-Kids continues to grow it will attract the attention of some prominent sponsors that could opt to sustain it; this will open the way to a superior level of delivery through the use of top level web technology and design that will render delivery even more professional and attractive. Such support will be exploited to engage in the provision of more resource-demanding components, including an online newsroom on the sea, dedicated blogs, fora and surveys, and to develop the website towards a fully dynamic content management system enabling inputs and updates from networked resource teams as well as by subscribed groups and directly by viewers. This will render the website a more popular point of access, offering services and activities that are of focal interest and appeal to children and youth.

IOI-Kids will continue to evolve as a virtual warehouse and information mining service on the sea. In its most innovative elements it will pursue to create a basis for the future virtual classroom setting, and serve the scope towards more IT-based classroom deliveries, where traditional whiteboards and exercise books will be replaced by monitors and virtual writing pads. A specific promotional and outreach strategy is essential to achieve these goals. The approach will be multifold, focusing on teachers to use the IOI-Kids as a teaching resource for an IT dominated educational methodology, and on children to exploit IOI-Kids not only as a source of information, but also as a medium for exchange of ideas with their peers across schools, cultures and countries, as well as to publish and share their selected works, projects and achievements, such as through joint projects and collaborative web experiences involving interactions with virtual classmates.