

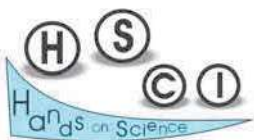
HSCI2009

Proceedings of the
6th International Conference on

Hands-on Science

Science for All: Quest for Excellence

October 27-31, 2009
Science City, Ahmedabad, INDIA



The Hands-on Science Network

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Proceedings of the
6th International Conference on Hands-on Science
Science for All. Quest for Excellence
27th – 31st October, 2009
Science City, Ahmedabad – 380360 (Gujarat) India

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The Hands-on Science Network acknowledge these sponsorships and collaborations



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**Methodology Used to Supervise the
Theses of Bachelor in Biology
(Educators of Children): from
Traditional Distance Education to e-
Learning**

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Abstract. In this work was analysed the results of supervise of 35 thesis during 4 years with different methodology. In first year (academic year 2005/2006) was used traditional distance learning, mail, telephone and e-mail. On second year was used a mix of traditional distance learning (same of last year) and also used of a Web platform with some documents and important information. In third year, was tried to use e-learning methodology but it only revealed to be possible with 50 % of the students. During the fourth year was used an e-learning methodology, but in a session, in the beginning of the year, was made a presentation to explain the students how to use it and its advantages. In this last year, all communication with students was made by forums in a page created in Moodle Platform. The results reveal that the students did not feel comfortable with e-learning model in first months. But after some months the students messages in forums increased significantly. These forums were moderated by the teacher. In forums all students could read the doubts of the colleagues and the answer of the teacher. The failure detected was the almost total absence of messages in the forums for information exchange among students. To the teacher's e-learning methodology needs very attention, being necessary going to the Moodle page several times a week, but avoids the explanation of same thing several times. To students e-learning methodology makes students feel more accompanied, as inquiries of last year reveal.

**Astronomy in the Service of
Mankind**

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Abstract. Astronomy is one area which has fascinated mankind from the beginning of history. The earliest man must have been the primitive astronomer. The striking spectacles presented to him by the varied appearances of a sky covered with thousands of twinkling and non-twinkling objects of different degree of brightness and daily changing phases of the moon must have raised strange feeling and curiosity to know about these celestial objects. Frequently asked question is how Astronomy is concerned with distant celestial objects, stars and galaxies and why should it be relevant to us on earth. Following are historical examples of how Astronomy helped human societies and cultures- a. Calendars b. Seasons and agriculture c. Religious Rites d. Navigations United Nations has declared the year 2009 as the 'International Year of Astronomy'. Four hundred years ago Galileo watched sky for the first time through his own telescope and revealed many secrets of nature. In the same year Kepler discovered three laws of the planet motion. These Kepler law gave basis of intuition of Newton's law of gravitation. The studies of planetary motions by astronomers had long term benefits which we enjoy today. Astronomical observations of comets, the discovery of new planets and studies of stellar structure established confidence in the law of gravitation in 18th century. In second half of the 20th century space technology was launched and built upon the foundations of the law of gravitation. None of the benefits of space technology would be available today if we did not have a law of gravitation. Astronomy added to the basic knowledge of controlled nuclear fission was developed. The another example of astronomy leading the way with new discoveries in science such as thermo-nuclear energy which will benefit mankind and solve its energy problem if the energy can be generated in a controlled fashion as in the star. Besides, space technology will one day bring sun's energy to the