

Appendix II

Bibliography

The following bibliography contains books concerning Didactics (D), Hands-on activities for didactics (H.D.), Physics (P) and Astronomy (A). By keeping into consideration what modules are about what topics, we provide references about what books are about what module.

Authors – Title – Publisher – Publishing date	Topic	About the module n°
Karplus, R., & Thier, H. – A New look at Elementary School Science – Rand-McNelly – 1967 It is an old book. The part related to Mister O is interesting. Mister O is widely used in this course, and it was already introduced in a magazine by the Italian Border of Education for getting someone's bearings.	D	1, 2, 3, 4, 5
De Landshere, V., & De Landshere, G. – On defining educational objectives – Pergamon Press – 1977 It is an old book. It contains a punctual analysis about how important it is to define educational objectives.	D	Every one
Gattullo M. – Didattica e docimologia – Zanichelli – 1983 It deals with evaluation theories.	D	Every one
D'Amore, B., & Manini, M. – Percorsi, labirinti, mappe – Esperienze protomatematiche nella scuola dell'infanzia – La Nuova Italia – 1985 It is important as far as suggestions concerning math activities.	D	1, 2
Caldelli, M.L. – Operazioni protomatematiche – N.Milano ed – 1984 It is important as far as suggestions concerning math activities.	D	1, 2
Schede didattiche: Le Groupe de Recherche Pédagogique du CLEA - Les cahiers clairaut - Les fiches pédagogiques - Hauguel – vol. diversi, anni diversi, dal 1981 Very interesting material as far as suggestions for educational activities.	H.D.	Every one
Atti del XI Meeting Nazionale dei Planetari Italiani – Bologna 96, a cura di Comune di Bologna – Associazione Amici dei Planetari. Some didactic suggestions for people who work in Planetariums, but which can be used in classes, too, with appropriate changes.	H.D.	1, 2, 3, 4, 5

AIF – La fisica nella scuola – Bollettini trimestrali Interesting approaches to scientific issues.	H.D.	5, 6
Zorzi P. – Sperimentazione didattica alla scuola elementare: un approccio integrato allo studio del Sistema Solare – Tesi di laurea in Astronomia, Padova – anno accademico 98-99 (you can find it, together with others thesis projects, in the web site www.polare.it for Astronomy Education).	H.D.	1, 2, 3, 4, 5
Grossi A. – Alcune proposte di esperienze didattiche per le scuole – Tesi di laurea in Astronomia, Bologna – anno accademico 98-99. Collection of educational didactic suggestions for Middle and High Schools.	H.D.	5.6
S.A.It. Giornale di astronomia – schede didattiche (anni diversi dal 1980) Interesting approaches to astronomical issues, with an in-depth study of this subject.	H.D.	Every one
EAAE Summer school – Proceedings 1997 – 1998 – 1999 – 2000 Particularly interesting didactic suggestions, especially for Middle School (you can have them by e-mailing to www.pd.astro.it/eaee).	H.D.	Every one
Turricchia, A., & Zini, G. – “Astronomia e Fisica: formazione di futuri docenti in un contesto non tradizionale” – XXXVIII Congresso Nazionale AIF – Ferrara – 27-30 ottobre pg 20 (1999) Hints concerning didactic path project and development, to be taught outside school environment.	H.D.	5, 6
Turricchia A. – “Ma è Astronomia o...” - La Didattica – Anno II – N3 – ed. Giuseppe Laterza (1996) Knowledge analysis concerning a small group of 3th grade students.	H.D.	2, 3
Romano G. – Introduzione all’astronomia – Muzzio editore – 1993 A simple but effective Astronomy textbook for learning some key concepts.	A	Every one
Turricchia A. – “Fra scienza, gioco e ...astronomia” – La Didattica – Anno III – N4 – ed. Giuseppe Laterza (1997) A K-5 experience about how to deal with the season topic.	H.D.	4 5
Massaro, F., & Turricchia, A. – “ Esperienze in giardino” – Giornale di Astronomia vol. 25 n.3 – trimestrale della S.A.It (settembre 1999). An experience about how to use the surrounding environment for dealing with educational issues.	H.D.	3

Leoni, G., & Turrlicchia, A. – I punti cardinali – Comune di Bologna – 1997 Didactic suggestions for dealing with this topic in a not traditional way. It is related to Astronomy on line by EAAE in 1996.	H.D.	3
Mantovani F. – Studio del Sole: appunti di Storia – Comune di Bologna – 1999 It is a simple magazine, which allows for correctly organizing our knowledge about the Sun.	H.D.	4, 5, 6
Parmeggiani G. – “I fusi Orari” – Comune di Bologna – 1999 Historical research about the necessity of introducing time zones and about their conventionality.	H.D.	4, 5
Bohm C. – Dall’astrolabio al telescopio spaziale – Editoriale Scienza –1996 It is an easy-to-read book, which approaches pupils to scientific issues. It also provides with simple instrument construction.	A	Every one
A cura di C. Balsamo – “Documentazione e strumenti di osservazione: una traccia” – Comune di Bologna (1991) Suggestions for construction of some instruments, which are useful for pedagogical and educational activities.	D	Every one
Lorenzoni G. – “Con il cielo negli occhi” – gruppo editoriale Marcon (1991) An Astronomy-related-experience carried out in an Elementary School	H.D.	Every one
The PPC – Moto nei cieli Unità 2 – Zanichelli 1970 Schoolbook for High School, which is clear enough even if it is not easy to read.	A	Every one
Schroeder W. – Practical Astronomy – Werner Laurie – London – 1956 It is a book about sky observations; easy activities are suggested; construction of instruments involved in the teaching units.	A	Every one
Bourge, P. & Lacroix, J – Observer le ciel à l’oeil nu et aux jumelles – Bordas, 1982 Suggestions for observing the Sky and the most important celestial bodies.	A	Every one
Landau – Rumer – What is the theory of relativity? – Mir Editorial – 1978 It is an easy hand-book for an introduction to relativity.	P	1, 2, 3
Bondi H. – Relativity and common sense – Dover Publications – 1962 It is an easy hand-book, which provides with observations concerning ideas about general relativity coming from “common sense”.	P	1, 2, 3

Verdet J.P – Le ciel ordre et désordre – Nouv. Ed. Paris: Gallimard 2001 It is a short book provided with hints for historical in-depth studies.	A	Every one
Verdet J.P – Une histoire de l’astronomie – Paris, Points Seuil – 1990 It is a book about history of Astronomy, easy to read.	A	Every one
Trinh Xuan Thuan – The Birth of the Universe: the Big Bang and after – New York – Harry N. Abrams Inc. – 1993 It is an interesting book, where to get educational hints.	A	Every one
Maury J.Pierre – Galilée. Le messenger des étoiles – Gallimard – 1986 It is interesting as far as historical texts, which can be used for lessons.	A	Every one
Feynman R. – The character of Physical Law – Cambridge – MIT Press – 1965 It is important book as far as Physics popularization. It requires some effort, but it is pleasant to read.	P	Every one
Matthews P.T. – Nel nucleo dell’atomo – Biblioteca EST-1980 It can be useful for simplification in explanations concerning the atom.	P	Every one
Kuhn T. – The Copernican Revolution – Harvard University Press – 1957 It is a fundamental, even if old, book for understanding big changes due to Copernican Revolution in Astronomy.	A	Every one
Kuhn T. – The Structure of Scientific Revolutions – Chicago – The University of Chicago Press – 1970 Fundamental book for understanding scientific revolutions.	P	Every one
A cura di Bonoli, Parmeggiani, Zuccoli- Leggere il cielo (lezioni del corso di aggiornamento per insegnanti) Bologna – 99-2000 Supplemento n 1 al Giornale di Astronomia (ottenibile dall’Osservatorio Astronomico di Bologna www.bo.astro.it).	A	Every one
Dreyer J.L.E. – A History of Astronomy from Thales to Kepler – New York – Dover Publications – 1953 History book, at University level.	A	Every one
Weinberg S. – The First Three Minutes – York – Pantheon Books – 1992 It is an easy-to-read book for an introduction to problems related to Universe formation.	P	Every one
Frabboni F. - Manuale di didattica generale- ed Laterza1999 It concerns general didactics, it does not concern specifically science education.	D	Every one

Planetario Virtuale It is particularly useful as far as the horizon concept, and those parts related to gravitational attraction. www.lestelle.net	H.D	2,4,6
I.Bordallo- J.P.Ginestet – Didattica per progetti – La Nuova Italia 2000 It is interesting and new, as far as new project and curricula development.	D	Every one
Cavallini – La formazione dei concetti scientifici (Senso comune, scienza, apprendimento) – La Nuova Italia – 1995 It is particularly interesting for 5 th grade teachers, where the Moon issue is explained.	D	Every one
Semeraro – La progettazione didattica – Teoria, metodi, contesti – Giunti – 1999 It is a useful textbook for developing educational courses, by keeping into consideration the new methodological settings.	D	Every one
Taylor, R.J. “Introduction to error analysis” – Oxford University Press Errors in physical measures. Chapter 1 is a simple introduction. Such introductions are present in the beginning of every chapter.	P	Every one
Hewitt, P.G. “Elementi di Fisica” ed Zanichelli (1992) An interesting, simple, full of references to everyday life approach to Physics. Since it uses very little math, it is not just for high school level, but for all school levels.	P	Every one
Amaldi U., Tibone F. “Fisica Interattiva” tre volumi con relativi CD, ed Zanichelli High school book, CDs are very interesting.	P	Every one
Pugliese Jona S. “Fisica e laboratorio”, ed. Loescher For Middle Schools.	P	5,6,7
Doherty p. Et al “ Gli esperimenti dell’Exploratorium” a cura di Cerreta P., ed. Zanichelli Cards for interactive experiments, for a generic public.	P	5,6,7
Amaldi U. “Temi e immagini della Fisica” ed Zanichelli Ideas and experiments from pendulum to quark, for High Schools.	P	5,6,7
Morrison P. Et al. “Potenze di 10” ed Zanichelli What happens if we add a zero?	P	5,6,7
M. Michelini, Pascoli P. “La luce trasporta energia: esperimenti per la scuola media con l’elaboratore on-line” in “Boltzmann, Stefan e l’energia radiante: momenti culturali per la didattica” Ed Graphics, Udine 1997	P	7