TUESDAY 21 AUGUST 2012

13:30-14:30	**Welcome** Opening address: Prof. Sfikopoulos Th., Vice Rector, National & Kapodistrian University of Athens, Dept. of Informatics and Telecommunications Prof. Zagouras Ch, Computer Technology Institute and Press "Diophantus" Prof. Clayson J. and Prof. Kynigos C., Conference Chairs

14:30-16:00 **Plenary Session**	**AEGEAN**
	CAFÉ PHILO AT CONSTRUCTIONISM 2012 Clayson J. & Noss R. *Chair:* Kynigos C. CONSTRUCTIONISM AND THE CONFIRMATION OF A RELUCTANT CONSTRUCTIVIST Goldenberg, E. P. *Chair:* Hoyles C.

16:00-16:30	**Coffee**

	AEGEAN	CORFU I	CORFU II	SYROS I
16:30-18:00 **Research Reports / Best Practice Reports**	**THEME: CONSTRUCTIONIST CLASSROOM EXPERIENCES** A TURTLE'S GENETIC PATH TO OBJECT ORIENTED PROGRAMMING Oldenburg R., Rabel M., Schuster J. METAFORA AND THE FOSTERING OF COLLABORATIVE MATHEMATICAL PROBLEM SOLVING Abdu R., Schwarz B. IS THIS CONSTRUCTIONISM? YOUNG CHILDREN, MATHEMATICS AND POWERFUL IDEAS? Papademetri-Kachrimani C. *Chair:* Yiannoutsou N.	**THEME: CONSTRUCTIONIST TECHNOLOGIES** THREE-MINUTE CONSTRUCTIONIST EXPERIENCES Kahn K., Noble H., Hjorth A., Sampaio F. F. MULTIMAP: A COMPUTATIONAL ENVIRONMENT FOR SUPPORTING MATHEMATICAL INVESTIGATIONS Feurzeig W., Horwitz P. CONSTRUCTIONIST LEARNING OF GEOMETRY Dagiene V., Jasute E. *Chair:* Wilkerson M.	**THEME: LEARNING PROCESSES AND CONCEPTS** THE TECHNICITY THESIS: A CONSTRUCTIONIST PROPOSITION O' Duill M. TOWARDS TURING TEACHING O' Duill M. MAKE TO THINK: IDEAS, SPACES AND TOOLS Urrea C., Badilla-Saxe E., Miranda – Garnier X, Barrantes - Acuna D. *Chair:* Psycharis G.	**THEME: INFORMAL EDUCATION (COLLECTIVES AND SOCIAL NETWORKING)** EDUCATIONAL ONLINE SOCIAL NETWORKING IN TERTIARY EDUCATION - A TEACHING INTERVENTION Glezou K. CULTIVATING CONSTRUCTIVE MINDSET IN WORLD MUSEUM - COLLABORATION ACROSS CULTURES AND GENERATIONS Miyata Y., Ueshiba T., Harada Y. REDEFINING CONSTRUCTIONIST VIDEO GAMES: MARRYING CONSTRUCTIONISM AND VIDEO GAME DESIGN Weintrop D., Holbert N., Wilensky U., Horn M. *Chair:* Sacristan A.

18:30-20:00 **Panel/debate**	**AEGEAN**
	HOW DO WE KNOW IT WHEN WE SEE IT? *Leader:* Goldenberg E. P. *Panelists:* Clayson J., Kalas I., Harvey B.

20:00	**Welcome reception at the Metropolitan Hotel**

WEDNESDAY 22 AUGUST 2012

	AEGEAN			
09:30-11:00 **Plenary Session**	CONSTRUCTIONISM: CHANGES IN TECHNOLOGY, CHANGES IN PURPOSE Eisenberg M. *Chair:* Harvey B. THE BEAUTY AND JOY OF COMPUTING: COMPUTER SCIENCE FOR EVERYONE Harvey B. *Chair:* Sherin B.			
11:00-11:30	Coffee			

	AEGEAN	CORFU I	CORFU II	SYROS I
11:30-13:00 **Research Reports /** **Best Practice Reports**	**THEME: CONSTRUCTIONIST CLASSROOM EXPERIENCES** BIFOCAL BIOLOGY: THE LINK BETWEEN VIRTUAL AND REAL EXPERIMENTS Fuhrmann T., Greene D., Salehi S., Blikstein P. CHILDREN'S REASONING ABOUT SAMPLES AND SAMPLING IN A PROJECT-BASED LEARNING ENVIRONMENT Paparistodemou E., Meletiou – Mavrotheris M. GREEK SALAD INSTEAD OF SPINACH OR PLAYFUL INFORMATICS Farkas K., Csink L. *Chair:* Smyrnaiou R.	**THEME: INFORMAL EDUCATION (COLLECTIVES AND SOCIAL NETWORKING)** EXPLORING THE CONE THROUGH A HALF-BAKED MICROWORLD Kouletsi E. LOGO-BASED ACTIVITIES FOR LEARNING COUNTING FOR CHILDREN WITH DOWN SYNDROME Bonilla J., Sacristan A. I. INTERACTIVE BOARD GAMES IN CLASSROOM Skiadelli M. *Chair:* Dagiene V.	**THEME: LEARNING PROCESSES AND CONCEPTS** TINKERING CREATIVELY WITH SUSTAINABILITY Daskolia M., Kynigos C. LITERAMOVIE-CREATIVITY IN A MULTILINGUAL AND MULTIMEDIA E-EDITION OF CLASSIC TEXTS Tzoumerkas J., Petropoulou V. DESIGNING TOOLS FOR CREATIVE LEARNING Portocarrero E. *Chair:* Clayson J.	**THEME: CONSTRUCTIONISM AND THE CURRICULUM** SCIENCE, EDUCATION AND TECHNOLOGY: ROBOTICS IN THE CURRICULUM AT SCHOOLS IN BRAZIL Campos F. CREATING MOTION MODELS BY MANIPULATING PARAMETERS THAT CORRESPOND TO SCIENTIFIC CONVENTIONS Smyrnaiou Z., Moustaki F. SOCIAL INTERACTIONS AMONG MODELERS Lerner R. M., Levy S. T., Wilensky U. *Chair:* Futschek G.

13:00-14:00	**Lunch** **International Scientific Committee Meeting (SYROS II)**

	AEGEAN
14:00-15:00 **Poster /** **Demo Session**	Posters will be displayed until the end of the Conference. Authors will present their work during this Session.

AEGEAN			
ROBOBUILDER: A PROGRAM-TO-PLAY CONSTRUCTIONIST VIDEO GAME Weintrop D., Wilensky U. ACTING LIKE A TURTLE: A NETLOGO KINECT EXTENSION Hjorth A., Wilensky U.	USING VIRTUAL GLOBES AND G.I.S. IN DIGITAL GEOGRAPHY TEXTBOOKS Athanasiadis C., Antoniou A., Salonikidis I., Klonari A. TEACHER ASSISTANCE TOOLS FOR THE CONSTRUCTIONIST CLASSROOM Geraniou E., Mavrikis M., Gutierrez-Santos S., Poulovassilis A.	EVOLUTION IN BLOCKS: BUILDING MODELS OF EVOLUTION USING BLOCKS Wagh A., Wilensky U. MODELING COMMONS Lerner R. M., Levy S. T., Wilensky U.	SUPERSONICMAN - AN INFORMATICS X PHYSICS PROJECT Benacka J. DIALOGS WITH PROMETHEUS: INTELLIGENT SUPPORT FOR TEACHING MATHEMATICS Rojano T., Abreu J.L.

WEDNESDAY 22 AUGUST 2012

	AEGEAN	CORFU I	CORFU II	SYROS I
15:00-16:30 **Research Reports / Best Practice Reports**	**THEME: CONSTRUCTIONIST CLASSROOM EXPERIENCES** CHILDREN LEARNING ABOUT "URBAN SUSTAINABILITY" THROUGH PLAYING AND RE-CONSTRUCTING A HALF-BAKED MICROWORLD Liarakou G., Daskolia M., Papanikolaou A. DESIGN AND LEARNING (D&L) IN THE KINDERGARTEN Mioduser D., Kuperman A., Levy S. T. GESTURES AS A TOOL OF SEMIOTIC MEDIATION IN A 3D TURTLE GEOMETRY ENVIRONMENT Latsi M., Kynigos C. *Chair: Blikstein P.*	**THEME: INFORMAL EDUCATION (COLLECTIVES AND SOCIAL NETWORKING)** OF PARTICLES AND BIKERS: JUNIOR TRIATHLETES INVENT DRAFTING TACTICS WITH AGENT-BASED MODELS Levy S. T., Hirsh A. COMPUTER AS CHALK: SUPPORTING YOUTH AS DESIGNERS OF TANGIBLE USER INTERFACES Millner A. MY INTERACTIVE GARDEN: A CONSTRUCTIONIST APPROACH TO CREATIVE LEARNING WITH INTERACTIVE INSTALLATIONS IN COMPUTING EDUCATION Przybylla M., Romeike R. *Chair: Holbert N.*	**THEME: CONSTRUCTIONIST TECHNOLOGIES** AN ONLINE SETTING FOR EXPLORING, CONSTRUCTING, SHARING AND LEARNING MATHEMATICAL IDEAS Olivera M. A., Sacristan A. I. REPRESENTATIONAL SYSTEMS ON 3D NAVIGATION PROCESS Markopoulos C., Alexopoulou E. CONSTRUCTIONIST DISCUSSIONS WITH AND AROUND MICROWORLD OBJECTS Mavrikis M., Kahn K., Dragon T. *Chair: Verner I.*	**THEME: CONSTRUCTIONISM IN TEACHER EDUCATION PROGRAMS** DESIGNING AND MODIFYING ARTIFACTS THROUGH ACTUAL IMPLEMENTATION IN MATHEMATICS CLASSROOM Kalogeria E., Psycharis G., Ardavani K. PREPARING TEACHERS TO USE LAPTOPS INTEGRATED TO CURRICULUM ACTIVITIES: THE EXPERIENCE OF ONE LAPTOP PER STUDENT PROJECT AT UNICAMP Valente J. A., Martins M. C. TRAINING MIXED GROUPS OF TEACHERS' AND STUDENTS' IN EDUCATIONAL ROBOTICS USING THE STUDIO PEDAGOGICAL MODEL Fessakis G., Kladogenis D., Markouzis D. *Chair: Stager G.*

16:30-17:00	**Coffee**

	CORFU I	CORFU II	SYROS I
17:00-18:30 **Workshop Session**	EXPLORE THE NEXT GENERATION OF SCRATCH Resnick M.	NETLOGO WORKSHOP Hjorth A.	3D MATH: CREATING AND DYNAMICALLY MANIPULATING 3D GEOMETRICAL FIGURES Psycharis G., Latsi M., Moustaki F., Zantzos I.

	CORFU I	CORFU II	SYROS I
18:30-20:00 Workshop Session	3D IN EXCEL Benacka J.	CONSTRUCTING MICROWORLDS WITH E-SLATE Kynigos C., Yiannoutsou N, Moustaki F., Xenos M., Anastopoulou M.	KNOWLEDGE CONSTRUCTION IN THE BEBRAS PROBLEM SOLVING CONTEST Dagiene V., Futschek, G.

THURSDAY 23 AUGUST 2012

	AEGEAN
09:30-11:00 Plenary Session	CONSTRUCTIONISM AND THE NEW LEARNING ANALYTICS Sherin B. *Chair:* Eisenberg M. NICHES FOR CONSTRUCTIONISM: FORGING CONNECTIONS FOR PRACTICE AND THEORY Kynigos C. *Chair:* Ackermann E.

11:00-11:30	**Coffee**

	AEGEAN	CORFU I	CORFU II	SYROS I
	THEME: CONSTRUCTIONIST CLASSROOM EXPERIENCES	**THEME: CONSTRUCTIONIST TECHNOLOGIES**	**THEME: LEARNING PROCESSES AND CONCEPTS**	**THEME: EDUCATIONAL ROBOTICS**
11:30-13:00 Research Reports / Best Practice Reports	THE CONTINUING STORY OF THE PAINLESS TRIGONOMETRY PROJECTS: ERATOSTHENES' METHOD AND THE PARTHENON Sacristan A. I., Jimenez-Molotla J. DIFFERENTIAL APPROXIMATION OF A CYLINDRICAL HELIX BY SECONDARY SCHOOL STUDENTS Zantzos I., Kynigos C. THE NECESSITY OF THE TANGENT Spathis M., Kouletsi E. *Chair:* Psycharis G.	MEANINGS FOR 3D MATHEMATICS SHAPED BY ON-LINE GROUP DISCUSSIONS Moustaki F., Kynigos C. CONSTRUCTION AND DESIGN ACTIVITIES THROUGH LOGO BASED 3D MICROWORLD Cho H. H., Lee J. Y., Song M. H. REPRESENTATIONAL CONGRUENCE: CONNECTING VIDEO GAME EXPERIENCES TO THE DESIGN AND USE OF FORMAL REPRESENTATIONS Holbert N., Wilensky U. *Chair:* Holbert N.	DRAMA IN EDUCATION AND CONSTRUCTIONISM Simou P. DESIGN COMPASS: FACILITATING METACOGNITION IN CONSTRUCTION ACTIVITIES IN K-16 CLASSROOMS Danahy E., Hynes M, Ronen A. LEARNING HOW TO LEARN WITH MICROWORLDS: EVALUATION AND HELP SEEKING Yiannoutsou N., Mavrikis M. *Chair:* Clayson J.	THE SYMBIOSIS OF DESIGN AND INQUIRY-BASED LEARNING IN CREATING ROBOTIC MODELS OF BIOLOGICAL SYSTEMS Verner I., Cuperman D. HOW TO ENHANCE THE ROBOTIC EXPERIENCE WITH SCRATCH Arlegui J., Moro M., Pina A. EDUCATIONAL ROBOTICS IN ONE LAPTOP PER STUDENT - UCA PROJECT d'Abreu J. V. V., Bastos L. B., Giachetto G. F. A. O. *Chair:* Smynaiou R.
13:30-20:00 Conference Excursion	Half-day trip to Cape Sounio plus beach & tavern			

FRIDAY 24 AUGUST 2012				
09:30-11:00 **Plenary Session**	**AEGEAN**			
	PROGRAMMING FOR THE NATIVES: WHAT IS IT? WHAT'S IN IT FOR THE KIDS? Ackermann E. *Chair:* Clayson J. MOTHER'S DAY, WARRIOR CATS, AND DIGITAL FLUENCY: STORIES FROM THE SCRATCH ONLINE COMMUNITY Resnick M. *Chair:* Noss R.			
11:00-11:30	**Coffee**			
11:30-13:00 **Research Reports /** **Best Practice Reports**	**AEGEAN**	**CORFU I**	**CORFU II**	**SYROS I**
	THEME: CONSTRUCTIONIST CLASSROOM EXPERIENCES	**THEME: CONSTRUCTIONISM AND THE CURRICULUM**	**THEME: CONSTRUCTIONISM IN TEACHER EDUCATION PROGRAMS**	**THEME: CONSTRUCTIONIST COMPETENCIES IN THE 21ST CENTURY**
	NETWORKING CONSTRUCTIONISM AND SOCIAL SEMIOTICS IN ORDER TO INVESTIGATE STUDENTS' BODILY ENGAGEMENT WITH TASKS IN THREE-DIMENSIONAL SPACE Psycharis G., Morgan C. GROWING UNDER PRESSURE: A THAI SCHOOL LEARNING HOW TO PROSPER WHILE BEING DIFFERENT Isarasena P., Tutiyaphuengprasert N., Sipitakiat A., A FRAMEWORK FOR CHARACTERIZING CHANGES IN STUDENT IDENTITY DURING CONSTRUCTIONIST LEARNING ACTIVITIES Worsley M., Blikstein P. *Chair:* Yiannoutsou N.	BUILDING THE SYSTEM OF DESIGNING OWN MATHEMATICS TEXTBOOK Kim H. K., Song M. H. BACK TO THE FUTURE: CAN WE REVERSE A QUARTER-CENTURY OF REGRESSION? O' Duill M. NICODEMUS EXPLORES EGYPTIAN FRACTIONS:A CASE STUDY Papadopoulos I. *Chair:* Verner I.	A CONSTRUCTIONIST METHOD FOR TEACHING TEACHERS ABOUT BASIC PROPERTIES OF COMPLEX ADAPTIVE SYSTEMS, USING A NETLOGO MODEL Gkiolmas A., Chalkidis A., Karamanos K., Papaconstantinou M., Skordoulis C. TEACHING HOW TO TEACH HOW TO TEACH PROGRAMMING Dagdilelis V. CONSTRUCTIONISM IN THE OILFIELD Tempel M. *Chair:* Futschek G.	TOWARD A DATA EXPRESSION TOOLKIT: IDENTIFYING THE ELEMENTS OF DYNAMIC REPRESENTATIONAL COMPETENCE IN YOUNG LEARNERS Wilkerson-Jerde M., Maldonis J. CONSTRUCTION KITS FOR TEACHERS: IMPLICATIONS FOR DESIGN Anastopoulou S., Daskolia M. FRIENDS OF PAPERTIAN CONSTRUCTIONISM Stager G. *Chair:* Sacristan A.
13:00-14:00	**Lunch**			
14:00-15:00 **Poster / Demo Session**	**AEGEAN**			

Posters will be displayed until the end of the Conference. Authors will present their work during this Session.

AEGEAN			
ACTING LIKE A TURTLE: A NETLOGO KINECT EXTENSION Hjorth A., Wilensky U. ROBOBUILDER: A PROGRAM-TO-PLAY CONSTRUCTIONIST VIDEO GAME Weintrop D., Wilensky U.	TEACHER ASSISTANCE TOOLS FOR THE CONSTRUCTIONIST CLASSROOM Geraniou E., Mavrikis M., Gutierrez-Santos S., Poulovassilis A. USING VIRTUAL GLOBES AND G.I.S. IN DIGITAL GEOGRAPHY TEXTBOOKS Athanasiadis C., Antoniou A., Salonikidis I., Klonari A.	MODELING COMMONS Lerner R. M., Levy S. T., Wilensky U. EVOLUTION IN BLOCKS: BUILDING MODELS OF EVOLUTION USING BLOCKS Wagh A., Wilensky U.	DIALOGS WITH PROMETHEUS: INTELLIGENT SUPPORT FOR TEACHING MATHEMATICS Rojano T., Abreu J.L. SUPERSONICMAN - AN INFORMATICS X PHYSICS PROJECT Benacka J.

15:00-16:30 Panel/debate	AEGEAN
	SEGREGATION FOR EVER? *Leader*: Blikstein P. *Panelists*: Eisenberg M., Sherin B., Kynigos C

16:30-17:00	Coffee

17:00-18:30 Workshop Session	CORFU I	CORFU II	SYROS I
	THE SNAP! PROGRAMMING LANGUAGE Harvey B.	METAFORA SYSTEM: LEARNING TO LEARN TOGETHER DURING EXPLORATIONS WITH MICROWORLDS Yiannoutsou N., Moustaki F., Xenos M., Mavrikis M., Abdu R.	THE ROBOSCRATCH THEATRE: CONSTRUCTING KNOWLEDGE WITH LEGO MINDSTORMS AND SCRATCH THROUGH ARTISTIC ACTIVITIES Bratitsis T., Fachantidis N.

18:30	Acropolis Museum & Conference dinner

	SATURDAY 25 AUGUST 2012
	AEGEAN
09:30-11:00 **Panel/debate**	CHANGING THE SUBJECT *Leader*: Wilkerson-Jerde M. *Panelists*: Temple M., Noss R., Dahaney E.
11:00-11:30	**Coffee**
	AEGEAN
11:30-13:00 **Panel/debate**	CONSTRUCTIONISM AND POLICY *Leader*: Valente J. *Panelists*: Hoyles C., Stager G., Ackerman E.
13:00-13:30	Conference Closing Ceremony

	POSTERS
1.	SCIENCE SIMULATION DEVELOPMENT WITH SCRATCH Glezou K.
2.	USING MALT FOR RESTRUCTURING THE APPROACH OF CURVES IN SECONDARY EDUCATION Zantzos I.
3.	REPRESENTATIONS OF STUDENTS' EXPERIENCE OF THEIR LOCAL ENVIRONMENT IN THEIR CONSTRUCTIONS OF DIGITAL GAMES Deveraki M., Xenos M., Daskolia M.
4.	STUDENTS' COLLECTIVE CREATIVITY WHILE CO-CONSTRUCTING DIGITAL GAMES ON THE IDEA OF SUSTAINABLE CITY Tsouma E., Daskolia M.
5.	USE OF AN EXPLORATORY SOFTWARE FOR TEACHING AND LEARNING ABOUT ENVIRONMENTAL ISSUES Gounari N., Daskolia M., Kynigos C., Flogaitis E.
6.	SIMULATOR FOR LEARNING ROBOTICS TOPICS IN XBOX CONSOLES Ortiz - Moreno A., Pretelin - Ricardez A., Luviano - Juarez A.
7.	THE PROGRAM "EDUCATION FOR ROMA CHILDREN". DESCRIPTION OF ITS ACTIONS AND PERSPECTIVES OF FURTHER DEVELOPMENT Parthenis C., Tseliou E.
8.	MAPPING MODELLING-BASED LEARNING IN EARLY CHILDHOOD EDUCATION Papademetri-Kachrimani C., Louca L.
9.	MAPPING PROBLEM-SOLVING IN EARLY CHILDHOOD EDUCATION THROUGH PROBLEMS INVOLVING CONSTRUCTION Shiakalli M. A., Papademetri C., Zacharos K.
10.	COLLABORATIVE MEANING GENERATION PROCESSES WHILE INTERACTING WITH A 3D TURTLE GEOMETRY MICROWORLD Moustaki F., Economakou K., Diamantidis D., Kaitsoti A.
11.	ARTIFICIAL INTELIGENCE SUPPORTING COLLABORATIVE CONSTRUCTIONIST ACTIVITIES IN ENVIRONMENTAL EDUCATION Xenos M.
12.	PLAYING GAMES ON-LINE AND AT THE SCHOOLYARD FOR GENERATING MEANINGS ON SCIENCE Smyrnaiou Z., Tsigaridis K., Varypati E., Evripidou R., Xantzaras T., Dimas J., Tsoutsou E.
13.	USING THE "D-STAGE" KIT TO DEVELOP 2D SCIENCE MICROWORLDS Smyrnaiou Z., Moustaki F., Xenos M.
14.	SUPPORTING STUDENTS' CONSTRUCTION OF PROGRAMMING MENTAL MODELS WITH E-BOOKS: THE CASE OF COMPUTER SCIENCE E-BOOK Tsakonas P., Petsos A., Toukiloglou P., Saridaki A., Christopoulou E., Paliouras A., Jimoyiannis A.
15.	"NEIGHBORHOODS": ENGAGING STUDENTS INTO INQUIRING ABOUT THEIR LOCAL COMMUNITIES FROM A PLACE-BASED PERSPECTIVE Anastopoulou S., Daskolia M., Rozaki M.
16.	CONSTRUCTIVISM EMBEDDED IN THE DIGITAL ACTIVITIES OF THE E-BOOKS OF RELIGION FOR SECONDARY EDUCATION Mitropoulou V., Argyropoulos N., Vasiliou V., Gikas A. et al.
17.	SMART CITIES WORKSHOP Papanikolaou D.
18.	USING SOCIAL BOOKMARKING SYSTEM TO ENHANCE THE ENVIRONMENTAL AND GEOGRAPHICAL LEARNING OF SECONDARY STUDENTS. A PRE-STUDY REVIEW Exarchou E., Klonari A.
19.	A SENSPONSIVE APPROACH TO TECHNOLOGY-DRIVEN PLAYGROUNDS Liapi M., Oungrinis K.A., Voyatzaki M.