

# Curriculum Vitae

## Nikoleta Yiannoutsou

### Contents

1.1	Personal Details .....	2
1.2	Contact information:.....	2
1.3	Languages:.....	2
1.4	Education .....	2
1.5	Recent academic experience.....	2
1.6	Research interests .....	3
1.7	Accomplishments .....	4
1.7.1	Mobile games for cultural heritage sites .....	4
1.7.2	Development of Educational Resources for teaching and learning with Technologies: .....	5
1.8	Selected publications .....	5
1.9	Skills .....	7
1.9.1	Interpersonal skills – effective communication with others .....	7
1.9.2	Ability to undertake leading roles but also work as part of a team. ....	7
1.9.3	Commitment to personal learning and professional development. ....	8
2	Work experience.....	8
2.1	Teaching .....	8
2.2	Professional Appointments.....	9
3	Publication list .....	11
3.1	Journal papers .....	11
3.2	Books .....	12
3.3	Chapters in Books.....	12
3.4	Conference papers .....	13
3.5	Workshop papers .....	14
3.6	Reviewer.....	15
3.7	Deliverables and Technical Reports.....	15



## CURRICULUM VITAE

### 1.1 Personal Details

**Name:** Nikoleta Yiannoutsou

**Nationality:** Greek

**Address:** 25 Deinocharous St, Ano Petralona, Athens Greece PC 11852

### 1.2 Contact information:

Tel. +30 6973235632

Email: [nyannoutsou@gmail.com](mailto:nyannoutsou@gmail.com)

Skype: nikoleta\_y

### 1.3 Languages:

Greek (mother tongue), English (fluent)

### 1.4 Education

1994 Psychology Graduate, University of Athens, Dept. of Philosophy Pedagogy and Psychology

1996 M.Sc. in Intelligent Tutoring Systems, The University of Nottingham, UK

1999 – 2005 PhD in Educational Technology, University of Athens, School of Philosophy, Dept. of Philosophy Pedagogy and Psychology, Educational Technology Lab

<http://etl.ppp.uoa.gr/index.htm>

*Thesis topic: “Spatial representations: Study of the learning process in a collaborative computer-based environment”*

### 1.5 Recent academic experience

I am currently teaching as an external scientific personnel “Design and Evaluation of Educational Technology” in the Master’s programme “Educational Theory, Practice and Evaluation: specialization New Technologies in education” run by the faculty of Pedagogy, School of Philosophy, National and Kapodistrian University of Athens. In this course I focus on theory underlying the design of educational software but also on supporting students from different disciplines (Humanities, Sciences, mathematics) to engage in secondary development of their own software using ESlate.

October 2013-July 2014 I acted as a tutor in the distance course “Educational Research in Action” at postgraduate level (Master’s in Education) in the Hellenic Open University ([http://www.eap.gr/ekp\\_en.php](http://www.eap.gr/ekp_en.php)). My tasks involved a) regular communication with the students (31 registered 24 active) focusing on discussing ways of dealing with any learning or practical difficulties, motivating the students, helping them to monitor their work b) grading and providing

## Curriculum Vitae

feedback on students' written assignments (4 assignments per student), c) conducting five (4 hour) Contact Sessions – Tutorials d) grading the final exams and e) participating in a working group that focused on creating additional educational activities to support understanding of the learning material (the activity focused on ethnography)

January 2013- December 2013: I worked as a senior Researcher with the HCI group at the University of Patras, Greece (<http://hci.ece.upatras.gr/index.php?lang=en>) to conduct research on designing technologies (emphasis on mobile devices and smart tangibles) that can enrich the cultural experience and support informal learning in cultural heritage sites (museums, archaeological sites, historical city centres). My role there involved a) fund raising – proposal writing and b) supporting PhD candidates in making design decisions especially with respect to the learning and the cultural experience pursued, in communicating and collaborating with the cultural heritage sites, and in conducting evaluation studies. I am currently organizing an evaluation study of a mobile learning game that is implemented in the Macedonian Museum of Contemporary Art (MMCA)

July 2010 - August 2013. Senior Researcher in an EU funded project (Metafora see section 2.2) with the Educational Technology Lab (<http://etl.ppp.uoa.gr/>). My role there involved coordination of ten (10) design based research studies in real classroom settings implemented in Greece (3 studies) Israel (3 studies), UK (2 studies), China (1 study) and Spain (1 study) (See Yiannoutsou & Kynigos 2014 in publication list). The focus of these studies was to design and evaluate pedagogical interventions that focus on Learning how to learn in collectives with a platform (the Metafora Platform) that combined exploratory environments with CSCL software.

### 1.6 Research interests

My research interests in the field of technology enhanced learning design involve the following topics:

- Games and game design for end users situated in settings of Formal and Informal learning ( methods of integration involving activity design and restructuring of existing practices)
- Game design and participatory cultures, learning through participation
- Learning not as an ad hoc property of games but as an inherent characteristic of the game experience (moving beyond the dilemma *when a game is serious is not fun and when a game is fun is not serious* )
- Game modding, game templates as instruments to support learning through participation and design thinking in formal learning
- The role of game content added in the same game template in modifying the gaming-learning experience

The last years my research has focused on the use of Technology (enriched with AI functionalities) in formal education to support domain learning in collaborative settings and learning how to learn together. In this context I explored the role of tools with no collaboration functionalities –i.e. like exploratory environments- and domain culture in shaping collaborative learning. Another strand of my research is related to the use of mobile and ubiquitous computing to support learning in informal settings. Within this area of study I have been involved in

- a) designing learning activities with emphasis on spatially aware games, narratives and “playful narratives”
- b) infusing learning activities with mobile technologies in museums and places of cultural heritage
- c) evaluating the use of technologically enhanced learning activities in settings such as those mentioned in point “b”

- d) determining the aspects that need to be taken into account in order to design learning activities based on mobile devices and define their learning potential
- e) designing tools that can empower museum visitors and support them to participate in the cultural experience by designing artefacts (games and stories) that they are of high quality and thus they can be used by other visitors, can mediate learning, can carry personal meaning, and they can evoke ownership. My research in this area is underlined by the perception of cultural experience as participation. Future research plans involve the role of smart tangibles in cultural experience and the study of collaborative activity in mobile learning settings.

## 1.7 Accomplishments

### 1.7.1 *Mobile games for cultural heritage sites*

- a) **Benaki Museum Scrabble** (<http://hci.ece.upatras.gr/bms/>) designed with the HCI group at University of Patras and Benaki Museum) The core idea involves connections between digital and physical objects
- b) **“Tangling”**: A mobile with the HCI group to be launched in November 2014 at the Macedonian Museum of Contemporary Art in Thessaloniki, Greece. The design is based on the idea of mixing and relocating tags on exhibits. Contribution: Learning and content design (see conference paper c1 in section 3.4 **Yiannoutsou N**, Anastasaki S., Mavini C., Manoli V., Dimaraki E., Avouris N., Sintoris C. (2014)
- c) **If ... in Malvasia** This a location based game (evaluation phase) to be delivered at the Centre of Environmental education in Lakonia (<http://www.kpemolaon.gr/>) at the end of October (pilot). I am collaborating with Dimitris Halvatzaras (<http://sofar.gr/>) and Christos Sintoris (HCI group University of Patras) for the design of the game focusing mainly on the integration of content and the form of the learning - gaming experience. The game mechanics allow connections between digital objects ( phrases, pictures) and physical objects (sites in the city). Digital objects are hypothetical roles or situations which the players have to connect with specific places in the city (example: If you wanted to save water for your people in the city in case of siege what would you do? Connection with an open cistern in the Upper City). The game aims at introducing some ideas about the history and architecture of the city and raising more questions than providing answers.
- d) **Story-Hunt** A location based game (evaluation phase) to be delivered at the National Park of Tzoumerka, Peristeri and Arachthos Gorge (end of June 2015: Greek official site: <http://tzoumerka-park.gr> , some info available in English can be found here: <http://www.epirusforallseasons.gr/portfolio/national-park-of-tzoumerka> ) ). I am collaborating with Dimitris Halvatzaras (<http://sofar.gr/>) and Christos Sintoris (HCI group University of Patras) for the design of the game focusing mainly on the integration of content and the form of the learning - gaming experience. This game consists of three “meta-stories” which refer to stories that took place in the broader area. The aim of the game is for the players to find where the different parts of the stories took place and thus connecting the story with specific sites. The term meta-story is used to indicate that the parts of the stories integrated in the game can be seen independently from the other parts which means that the players do not have to follow a specific order in order to situate them in space, but when viewed together they formulate a story. The game is to be launched in Tzoumerka on July 26.

### **1.7.2 Development of Educational Resources for teaching and learning with Technologies:**

**a) Ciphers:** (Designer: N.Yiannoutsou, Developer: K.Kyrimis, Development with E-Slate) This software is an exploratory environment where students try to decipher small pieces of text ( 250-300 words) by discovering the common difference of the arithmetic sequence used by the software to change the letters of the text and cipher it. The software allows students and teachers to type their own texts and cipher them using the arithmetic sequence of their choice. The ciphered texts can be handed to other students in the context of deciphering games ( You can download a more detailed description and the software from here <https://pithos.grnet.gr/pithos/rest/nyiannoutsou@upatras.gr/files/nikoleta/Ciphers.zip>) .

**b) Hidden text:** (Designer: N.Yiannoutsou, Developer: G.Birbilis, Development with E-Slate): The hidden text applies the idea of ciphers in the field of Language Teaching. The software is designed to support students to think about the characteristics of their Language in order to decipher the text. In Greek Language for example in order to decipher the text students need to think in terms of endings of words, in terms of short words that can be easily guessed like articles (etc). What we just described relies on a structural approach to Language where Grammar is Presented as a tool that models and describes Language. The software allows teachers and students to insert their own texts and devise their own models of text description (i.e. like synonyms, importance for the meaning of the sentence, relationship with images etc) in order to code and decode the texts (Currently, available in Greek ).

**c) Navigating the Mediterranean (from the 13<sup>th</sup> to the 18<sup>th</sup> century):** A scenario on History education that aims at engaging students with exploring history through identifying links between economy (trade in the Mediterranean), technological restrictions - developments (navigation with and without the compass) and historical events (Venetian occupation after the 4<sup>th</sup> crusade). Students create a map of the area based on a list of historical events after the 4<sup>th</sup> crusade in a Google – earth like sw. Then students play a trade game where the choice between different roles pirate, Captain of a Venetian Ship, Captain of a Byzantine Ship etc. Their ship has to travel in the Mediterranean with different start and ending points according to their role (a Venetian Ship might start from Venice and Finish in Constantinople or Alexandria). The route of the ship should be drawn taking into account information like the following i.e. winds, currents, maximum distance that can be covered by a ship per day, occupation and taxes in the different harbours, historical events like siege of a harbour etc. The idea of this scenario is now implemented into an educational game which is under development in the context of two master’s theses.

**d) Two educational packages for ICT in the classroom for the Greek Ministry of Education.** I have coordinated and Edited two **educational packages** “Discovering the World through the Computer” and "Educational Games" under the call of the Greek Ministry of Education with ten scenarios each . The second package (Educational Games) consists of scenarios and respective software (i.e. games developed with E-Slate, I coordinated game design and development ). Both packages were implemented in the context of the project NIIIDES II, (see also section 2.2)

## **1.8 Selected publications**

**Yiannoutsou N.** Kynigos C., Daskolia M. (2014) Constructionist Designs in Game Modding: The Case of Learning about Sustainability. In . In G. Futschek and C.Kynigos (eds) *Proceedings of Constructionism 2014: Constructionism and Creativity*. Pp 49-469 August 19-23, Vienna, Austria [http://constructionism2014.ifs.tuwien.ac.at/accepted\\_papers?cid=325](http://constructionism2014.ifs.tuwien.ac.at/accepted_papers?cid=325)  
[tags **Game modding, Game Design, domain learning**]  
*The paper explores the role of game modding tools in supporting creative domain learning. It is based on a review of employing game modding to facilitate learning and presents the idea*

*of “half-baked games”, that is games designed in a way that provides the appropriate tools and invite modification of those game features that are important not only from a game design perspective but also from the perspective of domain learning.*

**Yiannoutsou N., Avouris N., (2014)** Game design as a context for learning in cultural institutions. C. Karagiannidis, P.Politis, I. Karasavidis (eds) *Research on E-learning and ICT in Education. Technological, Pedagogical and Instructional Perspectives* pp 165-177, Springer ISBN: 978-1-4614-6500-3 <http://link.springer.com/book/10.1007%2F978-1-4614-6501-0>

Tags: **[game design for end users, mobile learning, informal learning]** *The paper explores the current trend in integration of mobile technologies in museums along with the idea of participation as a means to support an enriched cultural experience. This paper analyses how game design by end users can become a powerful tool of participatory cultures. The main idea of the paper involves the role of technology in providing a scaffold that can help museum audience to construct games which can function as “public artefacts” and can be added to the museum’s assets, enhancing audience engagement and community building.*

**Yiannoutsou N., Kynigos C. (2013)** Boundary Objects in Educational Design Research: designing an intervention for learning how to learn in collectives with technologies that support collaboration and exploratory learning. In T. Plomp, N.Nieveen (Eds) *Educational Design Research: Introduction and Illustrative Cases*. SLO, Netherlands Institute for Curriculum Development, Enschede, The Netherlands, pp 357 – 379, ISBN: 978 90 329 2335 8, Available in [http://international.slo.nl/bestanden/Ch01-51\\_total.pdf/](http://international.slo.nl/bestanden/Ch01-51_total.pdf/) [Tags: **design based research, qualitative research, evaluation of ICT in the classroom, boundary objects, interdisciplinary research**]

*The paper describes the implementation of design based research in ten studies across five different contexts (Greece, Israel, Spain, UK, China). Research involved the design and implementation of pedagogical interventions for teaching Learning how to Learn together Mathematics and Sciences with a tool that combines exploratory environments with CSCL tools (Metafora Platform). The paper addresses Design Based Research as an interdisciplinary task requiring various expertise and hybrid actors. Thus we introduce the idea of boundary objects as tools to integrate interdisciplinary knowledge, and we present three such objects (scenarios, scenario profiles and implementation protocols) we developed to support our research.*

**Yiannoutsou, N., Avouris, N., (2012).** Mobile games in Museums: from learning through game play to learning through game design, *ICOM Education*, vol. 23, pp 79- 86 (available in <http://ceca.icom.museum/node/203>): [tags: **Mobile Learning, mobile games, game design**]

*The paper offers a critical review of the use of mobile games in museums. It shows how the current use of mobile games is oriented towards information consuming and introduces the idea of participation through game design as a new model of experiencing cultural heritage.*

**Yiannoutsou, N., Papadimitriou, I., Komis, V., and Avouris, N. (2009).** "Playing with" museum exhibits: designing educational games mediated by mobile technology. In *Proceedings of the 8th international Conference on interaction Design and Children (Como, Italy, June 03 - 05, 2009)*. IDC '09. ACM, New York, NY, 230-233. [citations: 28] [Tags: **mobile games, mobile learning, design principles**]

*The paper describes two mobile learning games designed for use by young children in traditional historical museum. The analysis focuses on the principles of the educational design, on the use of mobile technology and on the envisaged interaction between the exhibits and the children. The main argument of the paper is that mobile technology can support the play with the exhibits of a museum -instead of just viewing them in the more traditional way–*

*and in this context the spectrum of children interaction with the exhibits can be broadened and enriched.*

## **1.9 Skills**

### ***1.9.1 Interpersonal skills – effective communication with others***

My work experience the last 12 years included

- a) **Collaboration in interdisciplinary groups** (developers, teachers, students, museums, researchers from different disciplines) mainly in the context of designing technologies for learning in formal and informal settings). I am affiliated to Educational Technology Lab (<http://etl.ppp.uoa.gr/> ) where we undertake research and development work mainly on Technology Enhanced Learning for formal education. I am also affiliated to the HCI group at the University of Patras (<http://hci.ece.upatras.gr/index.php?lang=en>) where we focus mainly on design work for mobile and ubiquitous computing supporting informal learning in cultural heritage sites.
- b) **Collaboration with teachers** : during my PhD I collaborated with the teacher who was teaching the class where I conducted my research. I provided teaching support as a phd student in Hill School in Athens and in Psychico College. I participated and monitored a teacher community in the context of **Seed project** See section 2.2)
- c) **Collaboration with students:** Young students : project C-Cube, and teaching support in Hill School in Athens and in Psychico College. High School students in the context of the following projects (Seed, LeGa, Citer, Thranio, Metafora see section 2.2 Professional appointments) and university students at
- d) **Participation in project meetings** (distance and face to face) and project reviews where I presented the work in the projects I participated
- e) **Collaboration with Museums and museum curators:** I have collaborated with curators at the Benaki Museum (Athens) and the Macedonian Museum of Modern Art (Thessaloniki) in the context of my recent academic post at the University of Patras which involves communication with museums and curators for including them in the design process – especially with respect to the content integrated in mobile games (see section 1.6)

### ***1.9.2 Ability to undertake leading roles but also work as part of a team.***

In my 12-year work experience I have worked as member of a team but also as an independent researcher. In the context of research projects I have worked effectively with other researchers in conducting research, in brainstorming and communicating project related information, in writing and submitting deliverables on time, in proposal writing and in working on publications for conferences, workshops, books and journals.

I have also formed a group of natural persons in order to participate in a call from the Greek ministry of Education that involved the development of Educational packages on designing exploratory activities with digital technologies for primary and secondary education [Call: PLEIADES: Development of Educational Software and Integrated Educational Activity Packages for Greek Primary and Secondary Schools – Distribution of Educational Software Products to Schools” Unit: NIRIIDES II]. After we received the grant I coordinated the development of two Educational A)“Discovering the World through the Computer” and B)“Educational Games” under the call of the Greek Ministry of Education. I have also worked as coordinator and project manager in various projects (see section 2.2)



### 1.9.3 *Commitment to personal learning and professional development.*

My research interests and work have expanded since the beginning of my career. This is expressed in the two main strands of my work which is also reflected in my publications (section 1.8 selected publications and section 3) the first strand involves the study of technology enhanced learning environments in real classroom settings across different subject matters (i.e. concepts of space, geography, language and history). The second and most recent strand involves design, use and evaluation of ubiquitous and mobile computing in informal education settings (i.e. museums and cultural heritage sites) with an emphasis on games and narratives. Next I provide some evidence showing acknowledgement of my contribution in the above fields:

- a) **Co-editor** in Constructionism 2012 proceedings: C. Kynigos, J.E. Clayson., N. Yiannoutsou (eds) (2012). *Proceedings of Constructionism 2012: Theory Practice and Impact*. Athens- Greece, ISBN: 978-960-88298- 3-1
- b) Scientific and organizing Committee in workshops: **Museum Learning with ICT** held in ICT conference in Volos, Greece, September 28-30, 2012 (in Greek <http://hcicte2012.uth.gr/main/?q=el/node/67> ) and b) “**Museums as Intelligent Environments**” <http://hci.ece.upatras.gr/masie/index.html> co-located with the conference on Intelligent Environments <http://www.intenv.org/?q=conferences/ie13/workshops> Held in Athens in July 2013
- c) Scientific and organizing committee in a special session “Mobile Learning in Cultural Institutions and Open Spaces <http://imcl-conference.org/imcl2014/mlcios.php> Held in the International Conference on Interactive Mobile Communication Technologies and Learning <http://imcl-conference.org/imcl2014/index.php>
- d) **Reviewer** for the IDC conference in 2012,2014,2015 (Interaction Design for Children)
- e) **Invited talk** at the ICOM – CECA, conference on The Use of Digital technologies in Museums, Athens June 28, 2010 Title: Use of ICT in the context of educational activities for museums the case of playful narratives as a tool for learning. (In Greek)
- f) **Invited lecturer** by the University of PECS, Hungary to teach to the Erasmus Intensive program “Cultural Management Policies and Practices for the Creative Use of Cultural Heritage”. The course “Creative Design of Stories and Games for Cultural Cities – Location based games and stories to support cultural Experience”. April 15- 27, 2013 <http://chm.feek.pte.hu/> and for the course program <http://chm2013.wordpress.com/course/>

## 2 Work experience

### 2.1 Teaching

Oct 2013-July 2014 [POSTGRADUATE LEVEL].Tutor at the Hellenic Open University. Distance course “Educational Research in Action” Master’s in Education (MEd)

2009- today and 2005-2006: [POSTGRADUATE LEVEL]Teaching as external scientific personnel on a per semester contract basis, at the master’s program “Educational Theory, Practice and Evaluation: specialization New Technologies in education” after invitation by the department of Pedagogy, school of Philosophy, University of Athens. Courses: a) *Learning process and Digital Technologies* b) *Design, development and evaluation of educational scenarios based on ICT* c) *Technologies supporting collaboration and networked learning*

2008 – 2010 September:[ UNDERGRADUATE LEVEL] Adjunct Lecturer, Faculty of Philosophy, Pedagogy, Psychology, University of Athens. Course: *Educational Psychology*



## Curriculum Vitae

2006 –2010 September: :[ UNDERGRADUATE LEVEL] Adjunct lecturer at the faculty of History, Archaeology and Management of Cultural Heritage, Department of History. Course: *Use of ICT in Historical and Archaeological Studies*

2006 –2009: [POSTGRADUATE LEVEL] "Pedagogy of specialised subjects with ICT", after invitation from the Faculty of Philosophy, Pedagogy and Psychology, Department of Pedagogy, University of Athens and the School of Technology and Pedagogy" Course: "*Learning process and Digital Technologies*"

2005 – 2006: :[ UNDERGRADUATE LEVEL] Adjunct Lecturer, Faculty of Philosophy, Pedagogy, Psychology, University of Athens. Course: *ICT in Education*

2001 – 2005 Teaching assistant (undergraduate and postgraduate level), faculty of Philosophy, Pedagogy, Psychology department of Pedagogy, ETL., University of Athens: in courses focusing on Learning and teaching with computational technology

1999-2003: Teaching support in using ICT in the classroom in Hill school (primary) and Psychico College (primary and secondary education).

## 2.2 Professional Appointments

October 2012-Sept 2014 **Senior Researcher** Talent Information Systems S.A. Project **Interactive Travel Agent**. Funded by The General Secretariat for Research and Technology and the Greek Ministry of Education, Religious Affairs and Life Long Learning.

January 2013- December 2013: **Senior Researcher** University of Patras, Electrical and Computer Engineering Department- Human Computer Interaction Group. Role: a) fund raising – proposal writing and b) supporting PhD candidates in making design decisions especially with respect to the learning and the cultural experience pursued, in communicating and collaborating with the cultural heritage sites, and in conducting evaluation studies.

2010 July- August 2013. **Senior Researcher** National and Kapodistrian University of Athens. **Project Metafora**: Learning to learn together: A visual language for social orchestration of educational activities EU Funded project. Grant agreement 257872. **Role**: Co-ordination of 10 small scale studies investigating Learning to Learn Together (L2L2) with digital tools in real classroom settings (for more information <http://www.metafora-project.org/home> and for a description of the research design see Public Deliverables D.3.1, D.3.2 and D3.3). Represented the University in project meetings and in project reviews.

2010 May- June 2012 **Senior Researcher –Person scientifically responsible** University of Patras, Department of Educational Science and Early Childhood Education. **Project**: *Implementation of Teacher Training Programs in PAKE- action 2.1.1.θ., Teacher Training in Information and Communication Technologies* **Role**: Person scientifically responsible for organizing the course of training teacher educators in using ICT in humanities. The role involved determining course content, selecting the lecturers, monitoring the process and teaching. Funded by the Greek Ministry of Education, Life Long Learning and Religious Affairs.

21.10. 2008- 31.03.2009: **Project co-ordinator** Research Academic Computer Technology Institute [10 Davaki street Amplelokoipoi, Athens, Greece PC 115 26. E-contentplus Project: *Creation of a European History Textbook Repository*. Acronym: **Citer**. Grant agreement Number ECP-2005-EDU-038193 Role: Development of Educational Scenarios and assisting the project manager in technical, educational and pedagogical matters.

2008-2009: **Project co-ordinator**. Erevnites S.A. Project: Implementation of three interactive multimedia products for the most important museums and archaeological sites of Greece (National and archaeological museum, Epidavros, Mycenae). The project is funded by the

“Hellenic Culture Organisation” (Hellenic Ministry of Education)

[http://www.hch.culture.gr/index\\_en.html](http://www.hch.culture.gr/index_en.html)

2006 – 2008 **Senior Researcher** University of Patras, Department of Educational Science and Early Childhood Education.. Project **Museum of Solomos, Kalvos and other eminent Zakynthians** The goal of the project was to build a digital repository for the “Museum of Solomos, Kalvos and other eminent Zakynthians” and a set of services concerning management of the collection and support for visitors and educational activities. The systems include navigation and educational support through a PDA context aware application as well as a web site that will allow access to information about the museum and the surroundings, visit preparation, educational activities visit planning and also digital repository administration. The role of the researcher was to design educational activities for the PDAs.

2007 – 2008 **Senior Researcher –Person scientifically responsible** University of Patras, Department of Educational Science and Early Childhood Education.. **Project:** *Implementation of Teacher Training Programs in PAKE- action 2.1.1.θ., Teacher Training in Information and Communication Technologies* **Role:** Person scientifically responsible for organizing the course of training teacher educators in using ICT in humanities. The role involved determining course content, selecting the lecturers, monitoring the process and teaching.

2006- 2008: **Project co-ordinator –Leader of a group of natural persons** . Project: PLEIADES: Development of Educational Software and Integrated Educational Activity Packages for Greek Primary and Secondary Schools – Distribution of Educational Software Products to Schools” Unit: **NIRIIDES II:** Development of integrated educational activity packages: “Educational Games”

7-7-2006- 7-4-2007: **Project co-ordinator –Leader of a group of natural persons.** Project: PLEIADES: Development of Educational Software and Integrated Educational Activity Packages for Greek Primary and Secondary Schools – Distribution of Educational Software Products to Schools” Unit: **NIRIIDES II:** Development of integrated educational activity packages: “Discovering the World through the Computer”

April 2005 – 2008: **Consultant- Designer of educational Activities** Project: PLEIADES: Development of Educational Software and Integrated Educational Activity Packages for Greek Primary and Secondary Schools – Distribution of Educational Software Products to Schools” Unit: **NIRIIDES:** Development of integrated educational activity packages “Sailing in Mediterranean Sea” Project Co-Ordinator RACTI. Funded by the Ministry of Education. The researcher is a consultant to the R&D department of Ellinogermaniki Agogi and co-ordinating a group of teachers engaged in designing educational scenarios based on ICT. The activities involve the lesson of history.

May 2005– Sept.2005 **Researcher: project LeGa** Innovation in Educational Practice – Learning through the Creation of Models and Games, General Secretariat for research and Technology, Ministry of Development, R&D Actions in the Information Society, E-learning call, #26/04. The researcher in project LeGa was involved in the design (providing technical specifications) of a treasure hunt computer game, in designing a learning scenario, in designing and implementing research in real learning situations (one case study), in analysing research results on the learning process, in writing deliverables and in participating in the management of the project for Rainbow Computers S.A.

April 2001 – Feb 2004 **Researcher: project SEED** ‘Seeding cultural change in the school system through the generation of communities engaged in integrated educational and technological innovation’, European Community, IST, School of Tomorrow, IST-2000-25214. (2001-2004).

## Curriculum Vitae

Project Leader, Computer Technology Institute. Specifically the researcher undertook the following activities:

- a) Monitored and supported along with another researcher a community of practice consisting of 22 members (12 teachers, 7 researchers, 3 developers) engaged in the secondary development of educational software and activity design. Her contribution focused on the subject of the community work, that is activity design and secondary development of the software-the other researcher focused on communication/collaboration issues- and involved co-organization of workshops, e-mail communication and face to face meetings
- b) Responsible for the co-ordination and completion of a WP (Activity Design and Software Authoring- Seed project) on behalf of the University of Athens, Educational Technology Lab. Specifically she was responsible for coordinating the work between the three partners (CTI, UDE-Collide, TECFA-Unige) involved in the work-package and for structuring the deliverables documenting the work done.
- c) Represented the University of Athens, Educational Technology Lab, in project meetings and project reviews
- d) Co-ordinated and participated in writing deliverables
- e) Co-ordinated, monitored and participated in a group of primary school teachers which were involved in authoring software and designing activities supporting map understanding and spatial orientation
- f) Participated in the management and administration of the project for the ETL – University of Athens. (cost-statements, quarterly reports)

2001 – 2002 **Research associate** in Rainbow Computers S.A.: **Kirki Project**, funded by the Greek Ministry of Education, was about the localization of Tabletop Jr. and Sr. in the Greek Educational System,

Sept 1999 - 2000 **Research associate** in Educational Technology Lab (University of Athens): project **C-Cube** ‘Children in Choros and Chronos’, European Commission, Esprit LTR, Experimental School Environments, #29346, 1999-2000. The researcher was engaged in the following activities: implementation of activity plans based on GPS software in lab settings, implementation of research, collection of data, data analysis, deliverable writing, participation in the project management for ETL.

1999-2001 **Research associate** in Educational Technology Lab: project “**Thranio**: Reusable software components for the authoring of high quality educational software for investigational activity”, #78, E.P.E.T. II, General Secretariat for Research and Technology. The researcher in the project was engaged in: activity design, secondary development of educational software, teacher education in integrating innovative activity plans based in ICT in the classroom, monitoring of implementation of the activity in the classroom, data collection, data analysis, deliverable writing.

## 3 Publication list

### 3.1 Journal papers

- [J1]. Sintoris, C., **Yiannoutsou N.**, Demetriou S., Avouris N., (2013) Discovering the invisible city: Location-based games for learning in smart cities. In *Interaction Design and Architecture(s) Journal*, 16, Special Issue on Smart City Learning - Visions and practical Implementations: toward Horizon 2020, pp. 47-64

- [J2]. Smyrniou Z., Moustaki F., **Yiannoutsou N.**, Kynigos C. (2013) Interweaving meaning generation in science with learning to learn together processes using Web 2.0 tools. In *Themes in Science and Technology Education*, 5(1-2), 27-44
- [J3]. **Yiannoutsou, N.**, Avouris, N., (2012). Mobile games in Museums: from learning through game play to learning through game design, ICOM Education, vol. 23, pp 79- 86 (available in <http://ceca.icom.museum/node/203>) [citations 3]
- [J4]. Avouris N., **Yiannoutsou, N.**, (2012), A review of mobile location-based games for learning across physical and virtual spaces, *Journal of Universal Computer Science*, vol 18 (15), Special issue on Technology for learning across physical and virtual spaces (pp 2120-2142) [Citations 4]
- [J5]. **Yiannoutsou, N.**, Bounia, A., Roussou, M., Avouris, N., (2011). A critical Review of the use of learning technologies in museums and sites of cultural heritage. In *Themes in Science and Technology Education, Special Issue on E-Learning and ICT in Education: Research trends and perspectives in Greece 4*(1-3) 131-149. [in Greek]
- [J6]. Sintoris C., Stoica A., Papadimitriou I., **Yiannoutsou N.**, Komis V., Avouris N.(2010), MuseumScrabble: Design of a mobile game for children's interaction with a digitally augmented cultural space, *International Journal of Mobile Human Computer Interaction, Special Issue on Mobile Interaction Design and Children*, 2 (2) pp 53-71 [citations 8]

## 3.2 Books

- C. Kynigos, J.E. Clayson., **N. Yiannoutsou (eds) (2012)**. *Proceedings of Constructionism 2012: Theory Practice and Impact*. Athens- Greece, ISBN: 978-960-88298-3-1

## 3.3 Chapters in Books

- [v1]. **Yiannoutsou N.**, Avouris N. (2014) Game design as a context for learning in cultural institutions. C. Karagiannidis, P.Politis, I. Karasavidis (eds) *Research on E-learning and ICT in Education. Technological, Pedagogical and Instructional Perspectives* pp 165-177, Springer ISBN: 978-1-4614-6500-3 <http://link.springer.com/book/10.1007%2F978-1-4614-6501-0>
- [v2]. Avouris N., **Yiannoutsou N.**, Sintoris C. (2014) : Interactive technologies for informal learning in museums through games and stories. In “*Cultural Management Policies and Practices for the Creative Use of Cultural Heritage*” an ERASMUS COURSE HANDBOOK – e-book ISBN 978-963-642-534-0
- [v3]. **Yiannoutsou N.** Avouris N. (2014) Game design as a context for Learning in Cultural Institutions. In C. Karagiannidis, P. Politis & I. Karasavvidis (eds.), *Research on e-Learning and ICT in Education*, Springer
- [v4]. **Yiannoutsou N.**, Kynigos C. (2013) Boundary Objects in Educational Design Research: designing an intervention for learning how to learn in collectives with technologies that support collaboration and exploratory learning. In T. Plomp, N.Nieveen (Eds) *Educational Design Research: Introduction and Illustrative Cases*. SLO, Netherlands Institute for Curriculum Development, Enschede, The Netherlands, pp 357 – 379, ISBN: 978 90 329 2335 8, Available in [http://international.slo.nl/bestanden/Ch01-51\\_total.pdf](http://international.slo.nl/bestanden/Ch01-51_total.pdf)
- [v5]. Ardito,C., Lanzilotti, R., Raptis, D., Sintoris, C., **Yiannoutsou, N.**, Avouris, N., Costabile M.F. (2011). Designing Pervasive Games for Learning. In *Design, User Experience, and Usability. Theory, Methods, Tools and Practice. Lecture Notes in Computer Science Volume 6770, 2011*, pp 99-108, Springer

- [v6]. **Yiannoutsou N.**, Trouki E. (2009) The role of Technology in restructuring and leveraging collaboration. In N. Avouris, V.Komis, C.Karagiannidis (eds) *Introduction to Computer Supported Collaboration. Systems and Models for Work, Learning, Communities of Practice and knowledge Construction*. (in Greek)
- [v7]. Tselios N., Papadimitriou I., Raptis D., **Yiannoutsou N.**, Komis V., Avouris N. (2008), Designing for Mobile Learning in Museums, in J. Lumsden (ed.), “*Handbook of Research on User Interface Design and Evaluation for Mobile Technology*”, pp. 253 – 269 Idea Group Publishers. ISBN: 978-1-59904-871-0

### 3.4 Conference papers

- [c1]. **Yiannoutsou N.**, Anastasaki S., Mavini C., Manoli V., Dimaraki E., Avouris N., Sintoris C. (2014) On Establishing Contact with Cultural Objects: The role of a location based game in supporting visitors to engage with contemporary art. In *proceedings of IMCL2014 International Conference on Interactive Mobile Communication Technologies and Learning*, Thessaloniki Nov. 2014
- [c2]. Sintoris,C., Yiannoutsou,N., Ortega-Arranz, A., López-Romero, R., Masoura, M. Avouris,N., Dimitriadis Y., (2014) TaggingCreaditor: A tool to create and share content for location-based games for learning proc. 8th International Conference on Interactive Mobile Communication Technologies and Learning, IMCL2014, Thessaloniki, November 2014.
- [c3]. **Yiannoutsou N.** Kynigos C., Daskolia M. (2014) Constructionist Designs in Game Modding: The Case of Learning about Sustainability. In G. Futschek and C.Kynigos (eds) *Proceedings of Constructionism 2014: Constructionism and Creativity*. pp 49-469, August 19-23, Vienna, Austria  
[http://constructionism2014.ifs.tuwien.ac.at/accepted\\_papers?cid=325](http://constructionism2014.ifs.tuwien.ac.at/accepted_papers?cid=325)
- [c4]. **Yiannoutsou N.**, Avouris N. (2012): From information consuming to participating: game-design supporting learning experiences in museums. In C. Karagiannidis, P. Politis & I. Karasavvidis (eds.), *Proceedings of the 8<sup>th</sup> Pan-Hellenic Conference with International Participation «ICT in Education»* University of Thessaly, Volos, Greece, 28-30 September 2012
- [c5]. **Yiannoutsou N.**, Mavrikis M. (2012) *Learning how to learn with microworlds: feedback evaluation and help seeking*. In C. Kynigos, J.E. Clayson., N. Yiannoutsou (eds) *Proceedings of Constructionism 2012: Theory Practice and Impact*. pp 490-499 Athens-Greece, ISBN: 978-960-88298-3-1
- [c6]. Wegerif, R., Yang, Y., De Laat, M., Pifarre, M., **Yiannoutsou, N.**, Moustaki, F., et al. (2012). Developing a planning and reflection tool to support learning. *Proceedings of IST-Africa 2012*.
- [c7]. **Yiannoutsou, N.** Avouris N., (2010): The Technology, the museum, the narrative, the game and learning: towards a meeting story. In *Proceedings of the 7<sup>th</sup> Panhellenic Conference with International Participation. Information and Communication Technologies in Education*, Korinthos September, 23-26, pp. 693-700 (In Greek)
- [c8]. **Yiannoutsou, N.**, Avouris, N., (2010) Reflections on use of location-based playful narratives for learning. In *Proceedings of the International Conference for Mobile Learning*, Porto, Portugal, 19 - 21 March, pp 149-157
- [c9]. **Yiannoutsou, N.**, Papadimitriou, I., Komis, V., and Avouris, N. (2009). "Playing with" museum exhibits: designing educational games mediated by mobile technology. In

*Proceedings of the 8th international Conference on interaction Design and Children (Como, Italy, June 03 - 05, 2009). IDC '09. ACM, New York, NY, 230-233.*

- [c10]. **Yiannoutsou N.** Kyrimis K. (2007) Aspects of the learning process as a basis for designing an educational computer game. (In Greek) In proceedings “*The 4<sup>th</sup> Panhellenic Conference of Educators for ICT- Using ICT in educational practice. Syros 4-5 May, Vol A. pp. 247 – 256.*”
- [c11]. Kynigos C. **Yiannoutsou N.** Frangou S. (2006): Transforming “Halfbaked microworlds” into computer games. An example of teaching programming. In *Proceedings of the 5<sup>th</sup> Panhellenic Conference with International Participation. Information and Communication Technologies in Education*, Thessaloniki, Oct, 5-8 (In Greek).
- [c12]. **Yiannoutsou, N.** and Kynigos, C. (2004) Map Construction as a Context for Studying the Notion of Variable Scale. In *Proceedings of the 28th Psychology of Mathematics Education Conference*, Bergen, 4, 465-472.
- [c13]. **Yiannoutsou N. (2004)** Using Symbolic Expression and Dynamic Manipulation to Construct Representations of Scale: The Perspective of Tool Characteristics in Facilitating Conceptual Change. In Stella Vosniadou, Christina Stathopoulou, Xenia Vamvakousi, & Nektarios Mamalougos, *Earli, 4<sup>th</sup> European Symposium*, Delfi Greece pp 116 – 119.
- [c14]. **Yiannoutsou N (2002)** “Treasure Hunt: A cartography activity with the use of ICT for studying spatial representations and systems of reference”. In A. Dimitrakopoulou (Ed) *Proceedings of the 3<sup>rd</sup> Panhellenic Conference with International Participation. Information and Communication Technologies in Education*, Rhodes, Vol B pp 67 – 76 (In Greek).
- [c15]. Kynigos C, Trouki E, **Giannoutsou N (2002)** ‘Generating communities of practice for educational innovation: experience from an institutionally distributed integrated authoring community’. In A. Dimitrakopoulou (Ed) *Proceedings of the 3<sup>rd</sup> Panhellenic Conference with International Participation. Information and Communication Technologies in Education*, Rhodes, Vol A pp 191-202
- [c16]. Kynigos C. **Yiannoutsou N. (2002)** «Seven Year Olds Negotiating spatial concepts and representations to construct a map». In Cockburn A.D., Nardi E. (Eds) *Proceedings of the 26th PME Conference* Norwich UK 4, 426 – 433.
- [c17]. Kynigos C., **Giannoutsou N. (2001)** «Seven –year olds collaborating to construct a map using GPS and space representation software» In Dillenbourg P., Eurelings A., Hakkarainen K. (Eds) *Proceedings of the First European Conference on Computer-Supported Collaborative Learning* (364-371), Maastricht, the Netherlands.
- [c18]. Kynigos C., **Yiannoutsou N. (2000)** “Symbolic representations and systems of reference in a microworld of map construction and use” *Proceedings of the 2nd Panhellenic Conference with International Participation Information and Communication Technologies in Education*, pp 539-548, Patras, Greece (In Greek).

### 3.5 Workshop papers

**Yiannoutsou N.**, Sintoris C., Avouris N. (2013) The design of mobile games as a context to rethink representations of space - Maps & Games Workshop, at the 26th International Cartographic Conference in Dresden 25 August 2013. [abstract]

Chounta, I.A., Sintoris,C., Masoura,M., **Yiannoutsou,N.**, Avouris N. (2013) The good, the bad and the neutral: an analysis of team-gaming activity. In proceeding of: *ECSCW meets EC-*



## Curriculum Vitae

*TEL: Workshop on Collaborative Technologies for Working and Learning, At Paphos, Cyprus, September 2013*

**Yiannoutsou N.**, Avouris N., Sintoris C., (2012) Audience participation in museums: Game Design as Learning Activity. In Proceedings of the 7<sup>th</sup> NordiCHI 2012: Making Sense Through Design, *Workshop on Design for Audience Engagement*

**Yiannoutsou, N**, Sintoris, C., Avouris, N. (2011) "End User configuration of game elements: Game construction as learning activity", *Proceedings, IS-EUD, Workshop Involving End Users and Domain Experts in Design of Educational Games*, 2011, Torre Canne, Italy

### 3.6 Reviewer

- a) Interaction Design and Children (2012, 2014,2015)
- b) Games for Learning, Special Issue for Interaction Design and Architecture(s) Journal <http://www.mifav.uniroma2.it/inevent/events/idea2010/index.php?s=102&link=call19>
- c) Design and Culture Journal <http://www.bloomsbury.com/uk/journal/design-and-culture/>
- d) Ambient intelligence (2014- Eindhoven)

### 3.7 Deliverables and Technical Reports

[Del.1]August 2013: D3.3. Report of the Analysis of the Experiments (Metafora Project-Main author)

[Del.2]February 2012: D3.2 Report of the pilot studies and refinement of the research design (Metafora Project- Main author)

[Del.3]February 2012: Addendum on D.3.2: Reflections on Scenario Design for Learning to Learn Together mathematics, sciences and environmental education with the Metafora System (Metafora Project- Main author)

[Del.4]August 2012: D.2.3 Interim report on the design-based research into group meta-learning (Metafora Project- contribution)

[Del.5]July 2011: D.3.1The scenarios, the microworlds and a description of the research design (Metafora Project- Main author also available in [http://www.metafora-project.org/index.php?option=com\\_content&view=article&id=33&Itemid=50](http://www.metafora-project.org/index.php?option=com_content&view=article&id=33&Itemid=50) )

[Del.6]July 2011 D.2.1 – Visual Language for Learning Processes (Metafora Project-contribution)

[Del.7]February 2005 Report on the design of learning activities (project LeGa in Greek)

[Del.8]September 2005 Final version of educational activities – software and documentation (description of Treasure hunt activity, manual, worksheets, project LeGa in Greek)

[Del.9]September 2005 Report of implementation of the learning activities in the school and the museum (implementation of the treasure hunt activity in the school project LeGa in Greek)

[Del.10]September 2005 Report on evaluation of the learning process (description of the learning process involving the treasure hunt activity. Project LeGa in Greek)

[Del.11] “Activity Design” Delivered in three Versions (version A 2001, version B 2003, version C 2004) Project Seed



[Del.12] “Activity Software” Delivered in two Versions (version A 2001, version B 2004)  
Project Seed

[Del.13] “Activity Templates” 2004 Project Seed

[Del.14]April 1999 Activity Design. Children in Choros and Chronos

[Del.15]September 1999. School Implementation Plan. Project Children in Choros and Chronos

[Del.16]October 2000 Final Implementation Report. Project Children in Choros and Chronos

[Del.17]November 1999 Description of educational activities. (Project Thranio in Greek)

[Del.18]March 2001 Design and implementation of software components-Final Version.  
(Project Thranio in Greek)

[Del.19]March 2001 Authoring of Educational Activities (Project Thranio in Greek)

[Del.20]March 2001 Evaluation of the software and of the learning process. (Project Thranio in  
Greek)