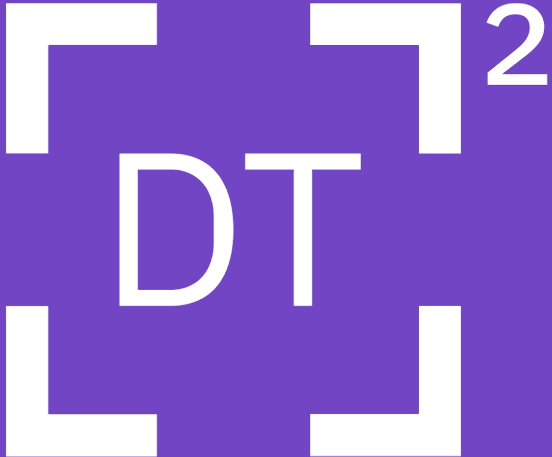


Exten 

OMT Meeting: 9 December 2022
WP2 - WP8 Updates

WP2: Progress: The Exten.(D.T.)2 Framework (1/2)

“Comprehensive review of the state of the art in the implementation of Design Thinking learning with Emerging Technologies “

- Conducted Literature review to collect relevant papers
(Search string: (“Design thinking” AND (“digital” OR “analytics”) in: Scopus, ERIC, Web of Science, ijCCI, IEE, ACM, BJET, EC-TEL, IDC, FabLearn, CHIplay, CHI, CSCL, LAK, CSEDU, C&E and other, did Snowball strategy, papers added related to the technologies, learning analytics feedback, criticism and other topics based on feedback from the meetings, added frameworks and reports on digital competencies, digital transformation of education
- Screened more than 5 000 papers from the search

WP2: Progress: The Exten.(D.T.)² Framework (2/2)

- Bi-weekly meetings

(all partners invited) started on 18th of November, 2 meetings in December, 2 meetings in January

- Input and small tasks asked from the partners and feedback/discussions during the meetings

(for the deliverable to be in line with the work of the other WPs)

- Next steps: Share the data extraction and analysis of the collected papers, share the table of contents for the deliverable, share the results for discussion and feedback from the partners

(the main writing of the deliverable will happen in January, share the first full draft by 31st of January)

WP3: Updates 12 Nov - 9 Dec

- Conducted a workshop with 2 teachers on 30th Nov interested to join the project

- Design of lesson plans for pilot evaluation:
 - produced a draft structure of what to pursue in each online workshop with teachers (Jan onwards) considering Activity Planner doc
 - **Action:** Thea to set up a meeting for reviewing the structure/content
 - which DT approach do we adopt?
 - online workshops may not work for all teachers - looking for alternatives
 - **Action:** NKUA and OU to produce support material about how to use each technology

WP4: Pre-Analysis of Defined Data for LA

NKUA: Have documented [all data](#) to be collected from different learning tools:

- Have completed the development of ChoiCo and MaLT2 tools to capture and send events and data to the smILE platform

LNU have started to go through the data description in order to:

- Define different data dimensions which represent Design Thinking process on different level of details (micro, macro-view)
- Define data aggregation methods for measuring 21st century skills (based on data collected by LA)
- Define data analysis methods to measure overall performance of students (individual and group level) in Design Thinking process
- Define the visualization approach for visualizing the results of data analysis and Design Thinking process

WP4: Work in Progress

- Gathering LA requirements from teachers
- Performing pre-analysis of the data described in previous slide.
- Deciding events and data to be captured by SorBET tool (NKUA)
- Developing the AR version of SorBET & ChoiCo (NKUA)

WP5 – School Interventions

Lead: NKUA

O5.1 To co-design, with teachers, industry, policy-makers and scientists, Digital-based Design Thinking interventions that deal with real-world problems.



- Activity Plan Template Document to be used for designing the DT interventions
- 4 examples of Activity Plans (developed by NKUA researchers, not planned interventions)

To Do:

- Finalize the 1st version of the Activity Plan Template → **Meeting on Dec 14th**
- Organizing workshops with teachers to co-design the interventions (WP3) → Jan 2023
- **By the beginning of March:** Have all Activity Plans ready for the interventions !!

WP5 – School Interventions

Lead: NKUA

O5.2 implement O5.1. interventions in school settings and generate data for evaluation (WP7).



Y1 target – **100** students

- Contact with Greek teachers (3 or 4 for this year) – Interventions in late February – March. **Have the technology ready by then !! (ExtenDT2 platform)**
- [School Interventions Excel](#) to keep track of all interventions
Please keep it update with your info!!
- Which partners are going to do pilot school interventions this year?
NKUA, OU, ??
- What procedure is needed for school interventions & data collection?
Permissions etc.

WP5 – School Interventions

Lead: NKUA

O5.3 Evaluate with teachers and students the ALA and Dashboard components.



- **Y1 To Do:** Test the initial design of ALA and Dashboard with **10-15** teachers & students → **Have a first version of ALA and/or Dashboard in Y1 (WP4)**

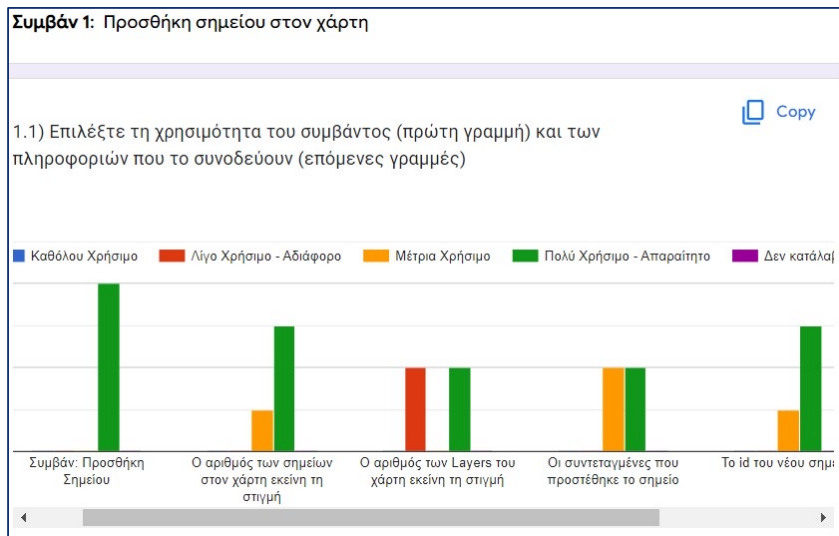
What has been done:

- (WP4) Design of the events & data that will be extracted by MaLT2, ChoiCo, SorBET (in progress). *e.g. when student rotates the camera (MaLT2), when student adds a point in the map (ChoiCo)* All data in [this document](#)
- 1st evaluation of and feedback on ChoiCo extracted events & data by 4 Greek teachers (using google form)
 - Data only **descriptive** as part of the participatory design process, the technology was not ready
 - Use this form later in the project?

WP5 – School Interventions

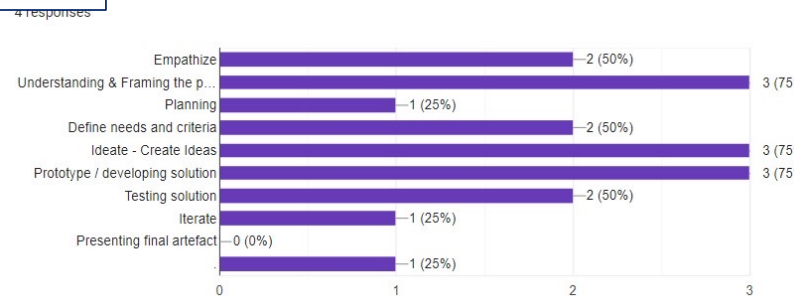
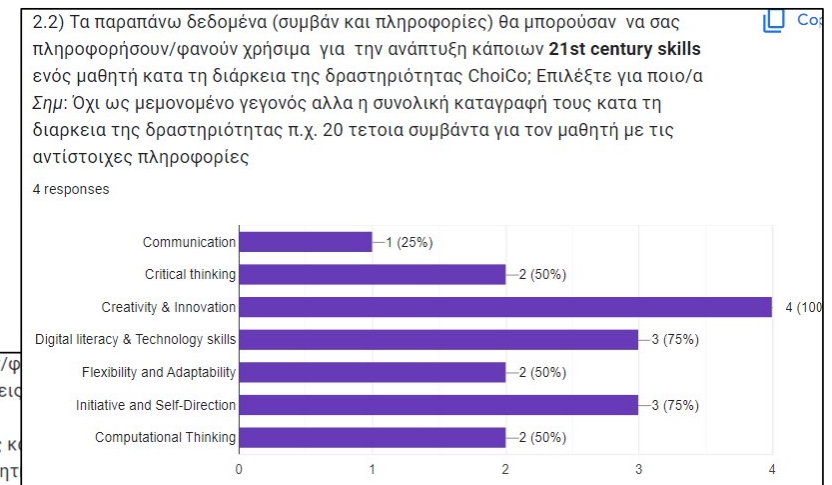
Lead: NKUA

Evaluation/feedback form for the events & data captured by the ChoiCo tool



Event: Add point on the map

απάνω δεδομένα θα μπορούσαν να σας πληροφορήσουν/φωτοδο ενός μαθητή σε κάποια(ες) από τις παρακάτω φάσεις. Επιλέξτε σε ποια(ες) φάσεις μεμονομένο γεγονός αλλά η συνολική καταγραφή τους κατά τη διάρκεια της δραστηριότητας π.χ. 20 τετοια συμβάντα για τον μαθητή και τις πληροφορίες

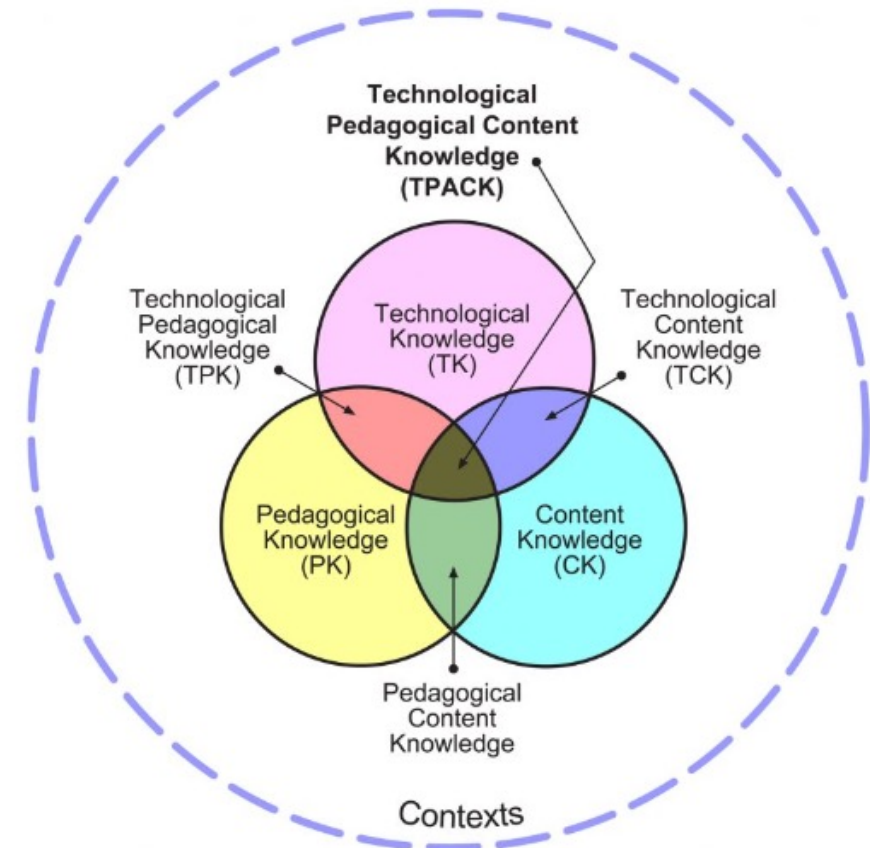


WP6: Professional Development

- Literature on professional development
- Literature on integration of technology in education: T-PACK model
- 19/12: UGent meeting for preparing WP6 kick off within consortium.

WP6: T-PACK Model (P. Mishra, M. J. Koehler (2006))

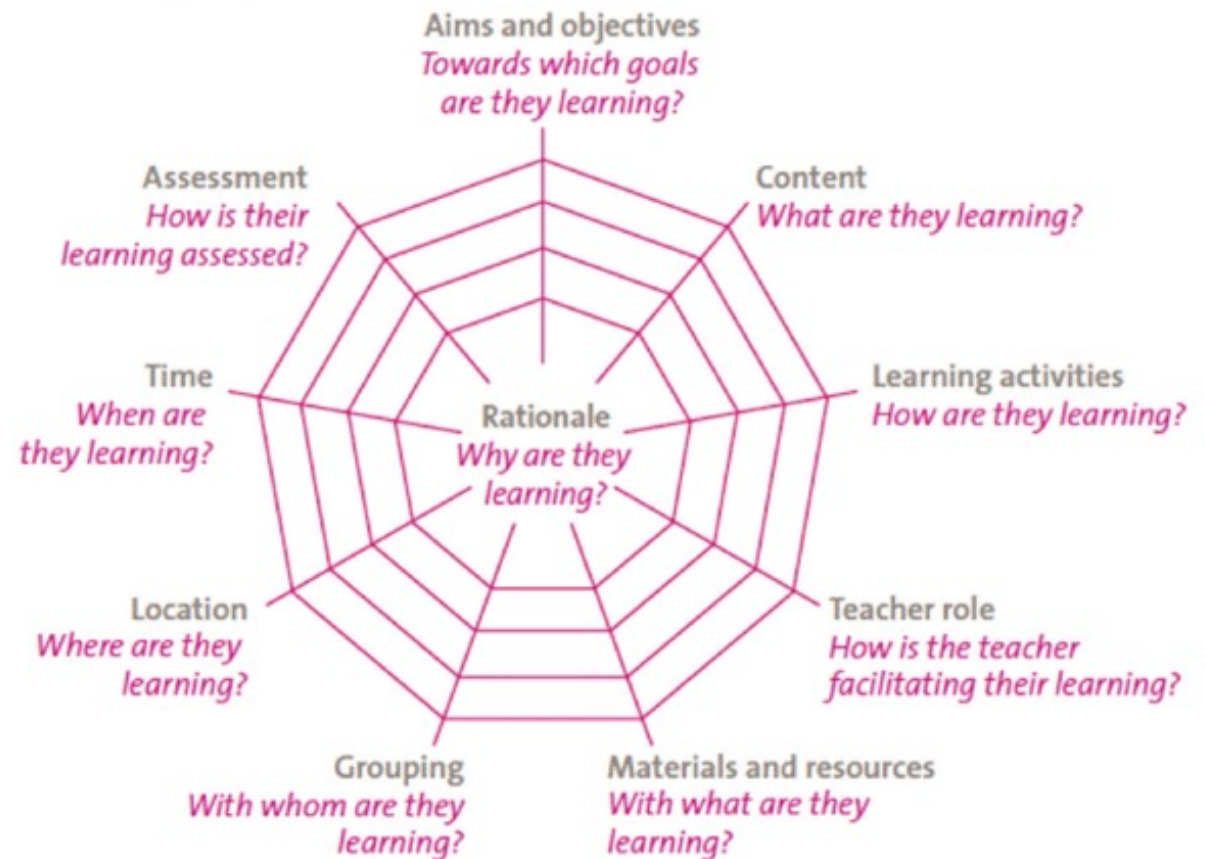
- Technological Pedagogical Content Knowledge.
- Framework on set of knowledge that teachers need to teach their students a subject, teach effectively, and use technology.
- Design of [DT]² project: take interactions into account, PD activities should stress these interactions



WP6: Curriculum Spiderweb

J. Van den Akker (2003)

- Different facets of curriculum development and implementation must be taken into account when developing material
- Tool for checking the designed educational material



WP7 Update

- Task 1 – Develop cycle 1 evaluation toolkit
 - RQ meeting 30/11 & analysis of proposal
 - Waiting on initial plans from WP3, 5 and 6
 - **Action:** Draft toolkit for review internally and then ethics (delay)
- Task 2 – SLRs
 - Search terms devised, revised and currently being run
 - **Action:** Review initial results, revise search terms & run again.
 - Leads: CG, JB & MG
- Task ??? – Needs analysis – stakeholders
 - Issue – no action so far and not a task listed but key to co-production etc
 - No clear WP, relevant to 3, 4, 6 & 7
 - **Action:** Identify a lead.

WP7

- Any project emails to me, please cc Jake: byrnej40@tcd.ie

WP8: Updates 12 Nov - 9 Dec

- Website (www.extendt2.eu):
 - bought a new wordpress plan that collects analytics
 - website has been updated with partner logos, new menu items and pages
 - **Action:** Thea to buy copyright free images and replace current ones
- Introducing the team campaign: Ugent/UCL contribution is missing
- Dissemination deliverable M6: a meeting to define how each partner can support dissemination etc
- Submitted first progress report, timesheets and expenses to Innovate UK and met with MO on 9th Dec (today).
- Issuing a UK visa for the researcher (by end of Jan)

WP8: Notes

- ICTMT-16 conference submission – deadline 23 Jan 23
<https://conferences.uoa.gr/event/47/>
- FB page? Two many to handle, we may need a new one when students engage the one they are using
- https://ilt.nutn.edu.tw/CTE-STEM2023/02_CFP.html - Sofia could send an abstract based on DT review