

Management meeting

Vienna, February 28 – March 3, 2013

Wednesday, February 28, 2013

Arrival all teams.

Present: Andreas Ulovec (University of Vienna, taking the minutes), Soňa Čeretková (University of Nitra), Oleg Mushkarov (Bulgarian Academy of Science, Sofia), Vladimir Georgiev (University of Pisa), Henning Westphael (VIA College, Aarhus), Freyja Hreinsdóttir (University of Iceland)

Thursday, February 28, 2013, 09:20 – 10:30

Andreas: Welcome to everybody. [Creating internet access]. We shall switch the order of the presentations, as not everybody is quite ready yet.

Oleg: [Presentation of BG team; see separate file]

Thursday, February 28, 2013, 10:50 – 12:45

Henning: I was inspired by the Night of Science, where we have a similar thing, the Natural Science Festival organised by the university. It would be very interesting to invite student teachers to bring in the focus there that science is something you can learn, i.e. that being good at science is something you are born with.

Freyja: Is this a European thing, the Night of Science?

Andreas: Yes.

Freyja: We use it to explain research to the general public. I have been there once, and had posters there. There also was an opportunity to play and experiment with this. Also I gave a radio interview there. So this is a good idea to increase interest.

Vladimir: Also in Japan they have something similar.

Vladimir: About inquiry-based learning, they also mentioned this at the Brussels meeting last year.

Oleg: There are also some ideas in BG to work with this.

Vladimir: **The materials that we prepared, they are in final form. But in the course, they started to work with the materials, so we can use feedback of the course to improve the courses or materials of the other partners.**

Oleg: **We definitely need the feedback form for this. Also it would be interested whether the feedback is similar in different countries.**

Vladimir: As to feedback of different countries, I received an email of a school in BG and they want to collaborate with schools in other countries about dynamic activities. I will send the email to everyone.

Sona: As to popularisation, it is a tendency all over the world that the interest is decreasing. We also did an exhibition in a large shopping mall in Nitra and presented something designed to attract the public. Also there is an open doors day where we try to attract students.

Freyja: How much math do they have to study in secondary school?

Sona: There are 3 hours of math in the first three grades, and at least 1 hour in the last grade.

Vladimir: [Presentation of IT team; see separate file]

Henning: I like this form of the alternative feedback, as it shows that the materials are not only used as such, but they also propose further tasks or solutions. But I also realised that the focus that we have in DK was very different, as we did not have that kind of open questioning. So I might **want to rearrange the DK materials to produce such open feedback.**

Vladimir: **It was clear from the beginning that we have different focal points or approaches,** so this is a **good thing to have variety.**

Sona: Lots of inspiration in this presentation.

Oleg: Are the **courses for pre- or in-service teachers?**

Vladimir: **One** course was **pre-service** and students, the **other was in-service.**

Freyja: [Presentation of IS team; see separate file]

Henning: About the last two slides: One possibility would be to ask the teachers “why this is in the curriculum” or “find a place where you can make it fit into the curriculum”.

Freyja: This is a good idea.

Henning: And the **last slide about the learning outcomes, there is nothing on didactical input** as to “learning with IT”. So it **might be difficult for the students to formulate the learning outcomes in the right way.** But **they might be able to formulate “why is this useful?”**

Freyja: I agree, but as I am a mathematician it was not too important to formulate the didactics theory. But it is a **good idea to ask about their idea of why it is useful.**

Vladimir: I really liked the point where you underline that the **content is important, and the IT is a tool to do that.**

Oleg: **How many hours do you think you need to do this course?**

Freyja: **One semester,** it would be **about 5 ECTS.** For an on-site course it would be **3x45min per week for 10 weeks,** but as it is a distance course it is hard to compare.

Thursday, February 28, 2013, 14:00 – 15:00

Sona: [Presentation of SK team; see separate file]

Vladimir: This was **very nice**, both the **cooperation between different projects**, as well as the **group competition**, which is not like math Olympiad. The difficulty is usually to organise these things.

Sona: A lot of the teams were on very high level, also mathematically. Particularly it was good to see the open approach, and problem-solving and problem-posing.

Sona: I also think about a **new project, to continue support this B-Day event**. Next year I have to think about how to manage it.

Thursday, February 28, 2013, 15:20 – 17:10

Andreas: The next point is **dissemination activities**. A bit of it we have already heard during the presentations.

Henning: **In DK we have not yet quite done lots of dissemination outside the internal use**. Tomorrow I will show some self-instructing courses, and our main dissemination will be through these courses. Also there is the **Nordic GeoGebra Network in DK conference in Copenhagen**.

Freyja: Yes I know, I will be one of the scientific committee members. I also have done some dissemination there in 2011 and 2012.

Vladimir: We had the **dissemination at the Brussels conference**, then at a **conference in Finland**.

Henning: We also **shall have some videos, if we can sort out the linking**.

Sona: What will be the **purpose of these videos?**

Henning: **Demonstrating**.

Sona: Then **how about translations or subtitles?**

Henning: I would **rather re-record them or re-dub the audio with English**.

Henning: We also can **send the materials to journals in Sweden and Denmark**.

Freyja: **Intention** would be **to present this at the Icelandic Association of Mathematicians, and a math teachers' conference in Iceland**.

Sona: **Mathematics conference in Nitra, June 27**.

Andreas: Now there is time for asking **organisational questions**.

Freyja: I have **travel money left. Can I take more people to e.g. Nitra?**

Vladimir: **Yes, but they have to be staff of your institution.**

Freyja: **Can they be temporary staff.**

Andreas: **Yes.**

Henning: I have five questions, with a lot of paperwork.

[Bilateral discussions about administrative and organisational questions]

Henning: Finally please let me know who will come to the MeetMe-meeting in Aarhus, May 8 – 11. **DynaMAT Meeting in Iceland is June 12 – 16.**

Friday, March 1, 2013, 09:10 – 10:15

Henning: [Presentation of DK team; see separate file]

Freyja: As to the presentation at the Nordic GeoGebra conference, the key topic this year is Screen Casting, i.e. exactly what you just showed us.

Henning: So the presentation there should rather be about GeoGebra, because our Casts are with Excel. So the question would be whether we would want more such videos.

Vladimir: But there are also good examples in Excel, and in Italian schools it is used more frequently than GeoGebra. **So if you have some examples with Excel, then please send them and we shall use them in our course.**

Henning: I like the idea of the **chi-square-simulation**, as to many of my students this is just a black box. So a simulation would really help them to understand it. It would also be really nice to simulate it with various degrees of freedom, but this might be a lot of work. And also add some screen casts.

Sona: I like the idea of **videos**. There also have been some videos like these in the earlier project. So we **might like to have subtitles**.

Henning: Maybe it's **quicker and makes more sense to re-record the audio**.

Henning: There is also the **question of the timeframe**. The **DK translation will be done very soon, whereas the videos have more time?**

Vladimir: Yes, there is a **couple of months**.

Andreas: [Presentation of AT team; see separate file]

Friday, March 1, 2013, 10:30 – 12:30

Sona: [Presentation of videos with subtitles from the PRIMAS project, <http://www.primas-project.eu>]

Vladimir: **Some of us prepared some Moodle courses**, so it would be **nice to have links** in between and the possibility of people registering for one of them in another institution. This also might help with the situation of broken links.

Vladimir: So **you** perform the **materials** and **present it**?

Andreas: **No, the students present.** And they **have to add materials that they think fits with it.** They **either present or make a teaching unit out of it and perform that.**

Andreas: Next topic is **how to sustain the courses and materials after the project lifetime.** Please everybody comment on that.

Henning: In DK we have a new teacher education soon, and it would be obvious to **have one of the courses for IT in teaching, using these materials**, as we have excellent examples in Excel and GeoGebra, and also using video and GPS etc. We would need some CAS materials to add, not as part of the project. I will hear in the next few months whether that is possible.

Sona: **The materials are already into regular lectures of “methods of solving mathematical problems”.** The **professional development courses are now regular**, as **they are accredited.** Half of these lessons are with e-learning and distance learning, half is presence courses. **I will also use it regularly from next academic year on in my regular math education lectures.** Also it **will be in the lectures for PhD students in theory of mathematics education.**

Vladimir: In case of Pisa, we have **started a program for preparation of future teachers, where there is a course “mathematics and society”, and the main part of it is based on our project**, in this year actually the whole course is our project content. In the future at least a part of it will be project content.

Oleg: As I am in a research institute, we will do things a bit different. **Jenny and Toni will organise regular courses in our institute, using the project materials.** We discussed in our board of directors already about the financial matters of such a course, as they invite teachers all over the country. Also the programs are already discussed. Of course they will also use other materials developed in other projects, to achieve networking.

Freyja: The **course presented yesterday will be done for real in the spring of 2014.** There might also be the possibility to cooperate with a geography teacher, using GPS, in connection with our materials.

Andreas: The **courses I just talked about will be held regularly, about every 3 out of 4 semesters.** Also **another course on using ICT in teaching mathematics has and will continue to use the materials**, particularly those based on GeoGebra and Excel.

Andreas: Let's **continue with fixing the deadlines.** Let's **start with the translations.**

Henning: We shall **translate the samurai problem, this will take about 2 weeks, then the materials' translation is finished.** Also the **videos need translation.**

Vladimir: **Translations have been done**, some modifications of the translation of AT new materials, also DK new materials, but these are only very minor details.

Oleg: Neli and Jenny told me that the **translations are mostly ok, some of the IT materials need modification.** There is **still some issue about links.**

Freyja: The **suggestion is to put everything that belongs to one material into one folder.**

Vladimir: We **shall have zip-files of single folders with all the materials.**

Henning: **How does the e-book look?**

Freyja: There **should be a preface that makes it look more like a book.**

Sona: The **search for keywords is already there, only people would not know what keywords are available.**

Andreas: Maybe we can **use a dropdown list with all the keywords.**

Henning: How is it with **ISBN number, and this being recognized as a “book”?**

Oleg: That would be good.

Sona: How about the **translators?**

Freyja: **I named them in the files**, you might do the same.

Sona: We already did.

Freyja: Let's continue with the deadline discussion.

Andreas: ... continuing with Oleg.

Oleg: To be honest, the **colleagues were nervous with Dropbox**. So there is **Napoleon Problem translated**. I will check about the exact status of **BG language version**.

Freyja: I have **done the IS materials in both IS and EN languages**, and there is a **lot of half-finished materials** (arithmetic mean, geometry in the field, tall tree, best spot, car wheels, playground, sequences, everything from Pisa, DynaART, loci, equations, aviation, lens, GeoCaching).

Andreas: **All the AT materials, plus playground, geometry in the field, Euclidean eggs, mathematics in nature, tall tree, and DynaArt are ready in DE**. The **Napoleon Problem waits for the final version in EN**, then we translate this as well.

Sona: In **SK we have chi-square and modelling stochastic problems in Excel, Euclidean Eggs, GeoCaching, harmonic triangles, arts and photography**. Some of the **translations are not very good**, so I have to re-check them.

Vladimir: Should we **fix the deadline of finishing the translations at April 15**, i.e. **everything has to be in Dropbox by April 15**, and will be **on the webpage by April 30**.

Freyja: Another question: About the **courses, what evidence would be there on the webpage?**

Andreas: We **shall have the description** that we talked before with Oleg, and these **will be on the webpage**.

Freyja: But it is **not very likely to open the E-Learning courses to the public.**

Andreas: **No, probably not.** The descriptions are enough.

Andreas: OK, let's go back to the **Nitra conference dates.**

Sona: The **date of the conference is September 25**, so it would need to be around these dates.

Freyja: There is quite some teaching to do, so I need to check. Could we have a **first suggestion to arrive Sunday September 22, internal meetings Sept 23 and 24, conference Sept 25, and leave Sept. 26.**

Henning: And we shall **think about the MeetMe meeting as well**, so arrival-departure dates might be shifted.

Vladimir: As this is almost decided, do you think it is a good idea to come on 18th of June to Vienna with respect to the MeetMe project.

Andreas: Yes, that would be a perfect date, as it is the last appointment with the students before video analysis.

Freyja: As to the **Iceland meeting, should we have a little mini-conference on June 14**, where **each of us presents something about the project?** Who will come to the Iceland meeting?

[Agreement on mini-conference]

Andreas (+ evtl. 1 person), Vladimir (+evtl. person), Henning (+ evtl. 1 person), Jenny, Sona (+ evtl. 1 person).

Freyja: I will tell you soon until when I have to know about the exact number of persons.

[Discussion about unified course description]

It should contain: Title, ECTS units (of DynaMAT content), Target group(s), ~number of participants, number of hours (contact hours, presence hours), DynaMAT materials used (list), aims/learning outcomes, structure, assessment, place, time period, person in charge.

Friday, March 1, 2013, 14:00 – 15:15

Andreas: Next point would be the **feedback form for the Courses.**

Henning: One question would be if we would **narrow down the feedback to the DynaMAT-related material?**

Vladimir: How about **using parts of the preliminary course evaluation forms' question:**

How you like the material?

Was the material adequate?

Do you think this activity can be useful for other subjects as well? Which ones?

Can you understand the arguments presented during the activity?

Technical prerequisites?
Does the course achieve the main purpose?
Do you think that you were successful in the activity?
Do you want to share other ideas?

Henning: What is the **feedback used for?**

Andreas: To **improve the courses.**

Vladimir: Also let's only **fix minimum content, and we can have localized version** (which we have anyway as to languages) with eventual more questions.

Henning: But there are many focus points that we could concentrate on in the feedback form. It should not be the materials as such, but the way it is presented, the way the course is organised etc.

- **Personal data: Student teacher vs. in-service teacher (length of teaching experience) vs. PhD student, preliminary knowledge, male/female, age, ...**
- **How did you like the course? 4 (very much) – 1 (not at all)**
- **How did you like the E-Learning part of the course? 4 (very much) – 1 (not at all)**
- **Was the material adequate for this course? 4 (very much) – 1 (not at all)**
- **Did you know/learn(ed) the all the technologies that you needed for the course? If not, what did you miss?**
- **Does the course achieve its main purpose of ...**
- **Did the course encourage you to engage actively with the topic**
- **How did you like the materials:**
 - **Material A: 4 (very much) – 1 (not at all)**
 - **Material B: ...**

Henning: And then **what would we do with this?** I guess **make a summary**, like 1 page.

Andreas: Yes, I think **everybody should write a summary of reasonable length for each of the courses.**

Henning: We might have problems in DK, as the teachers might be locked out of their work for some time.

Vladimir: This would be no formal problem, if it is not possible “in the framework of the country” as we wrote in the application.

Saturday, March 2, 2013, 09:05 – 11:15

Freyja: I have mailed with my colleagues, and we can **fix the dates for the Nitra meeting.**

Vladimir: So **arrival is Sunday Sept 22, DynaMAT internal meetings Sept 23 and 24, conference Sept 25, MeetMe internal meeting Sept 26, departure Sept 27. Everybody tell by the end of April who will come to Nitra.**

Andreas: Today we have two points: The **homepage, and the E-Book final format.** Let's start with the homepage.

Sona: Here is the **homepage, currently 5000 visitors** since project start.

Sona: For the **“outcomes” section**, it would be good to **have photos from events or courses**. **I created a folder in Dropbox**.

Andreas: Would this be the **right place to put the course descriptions?**

Vladimir: **And course links?**

Sona: **Maybe not links, as yesterday we said the courses would probably not be open.**

Vladimir: Sona, is it possible to have a link to a special section of the official conference homepage, where the DynaMAT section is.

Freyja: **What will we do in this conference?**

Sona: **It is our section, so we decide. Give presentation about our courses, materials, etc.** There are also proceedings where the abstracts will be published. The **registration deadline is June 15**.

Henning: Could we have the link for this?

<http://conferences.ukf.sk/index.php/phdconf/phdconf2013>

Andreas: **Next is timetable**, but it **does not look like timetable**.

Vladimir: But the **content should remain**.

Sona: We have something like it in PRIMAS.

Vladimir: Send me the link, and I shall prepare it.

Andreas: Why don't we **call it “work packages”**?

Agreed.

Sona: Next is **“dissemination”**.

Vladimir: Here we can **use our minutes, and put the information about dissemination activities on the homepage**. I will make a list, and send to you, then we put it on the homepage.

Vladimir: Also we can put **photos from dissemination activities, and links to posters etc.**

Sona: We have **designed the dissemination report form**, so should I **send this to everyone?**

Andreas: **Yes, send it, and then everybody fills it and sends it to Vladimir**, so that he can **compile the list of dissemination activities**. Until when we should send this?

Vladimir: Send them **until May 15**.

Vladimir: And I shall be rigid about deadlines, as we approach the final phases of the project.

Andreas: **How about the languages?**

Sona: **I will send certain texts, and you send me back the translations.**

Andreas: Last point of the homepage, and second mayor point of todays' meeting, is the "materials", i.e. the **E-book**.

Freyja: **When you open "materials", there should be some introductory text, and this might need to be in our languages.**

Andreas: I would have a proposal: To have the flags on the top of the sub-page, and if you click the flag, both the introductory text would be in national language, and the keyword dropdown list will also appear in national language.

Sona: **I shall send the Excel file with the keyword translations and keyword-article connections. Or, rather, I put it into Dropbox, into the folder "Management".**

Andreas: **Who will write the introductory text?**

Freyja: **I can do that. I will put it into Dropbox, "Management".**

Freyja: **How do we manage the GeoGebra and other software files?** How do we make the connections?

Henning: There are two kinds of materials, those where we want the students to build the files, and those where we want them to use the finished files.

Henning: Should we just have another icon for "zipped folder", and when you click you get the additional software.

Andreas: Yes, so **everybody please go through your own materials and decide for which pieces you want a zip file or not.**

Vladimir: If we want ISBN for an E-Book, I checked how we can do this. We need to contact publishing houses, and ask whether it is possible.

Andreas: And we would need to ask what format it would have to be.

Sona: I would suggest to ask Jarmila. Also you would probably need a DVD.

Andreas: Shall we ask the publishing house, and let them produce 50-100 DVD's?

Vladimir: I shall write the proposal and write together with Sona to Jarmila, also about being a reviewer.

Andreas: **What is the E-Book then, finally? Should we rename the title "materials" into "E-Book"?**

Freyja: Rather "Materials in the E-Book". Also we would need a preface.

Henning: Yes, I agree.

Vladimir: We might make it in the style of Math2Earth-preface, and the content of the DynaMAT application.

Andreas: I would **volunteer to write a draft version, then we will circulate it.**

Oleg: **Maybe it is traditional that I ask this, this is “E”, but still a book. So a very brief description would be good.**

Andreas: Yes, I **will put this into the preface.**

Andreas: Thank you, this concludes the discussions for this meeting. I am looking forward meeting most of you in Aarhus, and all of you in Iceland.

Summary of decisions:

- **Finalize translations and put them on Dropbox, deadline April 15**
- **SK team put translations on homepage by April 30**
- **IS team to write introduction to “materials” section**
- **AT team to write book preface**
- **Mini-conference at Reykjavik meeting will be on June 14, partners to prepare presentations for this, 1 per team**
- **Partners will create local version of feedback form, minimum content as highlighted above, and can add local questions**
- **Partners will fill dissemination form and put them on Dropbox “management” folder until May 15**
- **SK team: Send out Excel file with words to be translated for homepage**
- **IT team: Change administrative website according to discussion above**
- **Next meeting in Reykjavik, June 12 – 16**
- **Final conference and final meeting in Nitra, Slovakia, September 22 – 26 (for DynaMAT)/27 (for MeetMe)**