

MatRIC

Centre for Research, Innovation and Coordination of Mathematics Teaching

Centre Management Board

Meeting Time: Wednesday 26 March, 2014: 09.00—13.00

Place: J2-001, Gimlemoen

Minutes (not yet verified)

Attending: Marit Aamodt Nielsen (Chair), Frank Reichert, Elna Svege, Claire V. Berg (subst. for Morten Brekke), Inger Johanne H. Knutsen, Ingvald Erfjord, Harald Hoven Gautestad, Henriette Nygård, Frode Rønning, Margrethe Naalsund, Helen Bråten (NOKUT) Simon Goodchild, Anne Berit Fuglestad, Sondre Tørdal

- 13/14 Apologies for absence received from Morten Brekke
- 14/14 Agreed agenda for meeting, no additional items added to revised agenda circulated 22 March.
- 15/14 Minutes from meeting held on 19.02.14 were accepted as an accurate record.
- 16/14 Matters arising from minutes.

(07/14) Appointments: SG reported that the Centre Project manager, Line Malde (present at the meeting) would officially take up her work within the Centre on 1 April 2014.

The MatRIC fellowship had attracted 14 applicants. These will now be considered by the evaluation committee.

A Post doctoral position has been advertised. Closing date for this 3 April, 2014. (09/14) Newsletter. This was produced with the help of Jan Arve Olsen, as suggested in the last board meeting.

(11/14) *Action point* – universal access/common access point for teaching videos etc. The earlier difficulty in connecting with the NTNU videos has not persisted and these can be accessed OK. SG raised some concerns about getting permissions to publish, especially from the Norwegian Data Protection Agency (NSD). We will seek advice about this. Helen Bråten (NOKUT observer) noted this was a problem shared with other SFUs and that it was likely NOKUT would also pursue the issue.

- 17/14 Centre Leader's report was received (Attachment #1)
- 18/14 Reflections on Launch Conference (11-12 March, 2014). Experience of the event and subsequent evaluation feedback from participants suggest the conference had been

successful. However, the event did provoke a number of critical reflections about the representativeness of MatRIC (e.g. there were many teacher educators present, few if any from economics and the presentations had a strong engineering bias). Also the focus had been on innovation and implementation with little emphasis on research (pedagogical/didactical). These reflections demonstrate the need to attend to the 'vertical strands' (subject orientations through the work groups) and marketing MatRIC (especially to economists) – perhaps subject focused sessions in the November conference. Also the integration of a clear research agenda in the 'horizontal strands' (working groups).

- Observations from meeting with International Advisory Board. Some observations are included in the Centre Leader report. Subsequent to the launch Conference SG had received an e-mail from the Advisory Board in which they suggested more commitment to mathematics education research within the work groups. (see attachment #2)
- Budget revision: Two items had arisen since the last Board meeting which the Management Board was asked to consider and if approved accept a revised budget.

 (a) Web pages: The design company engaged to develop the MatRIC logo and profile, and web site had presented an offer for web-site development that was considerable above the amount agreed in the original budget.

The Board gave approval to accept the offer and necessary adjustment to the budget.

(b) Small research grants: In the last Management Board SG and Elna Svege (Head of Department of Mathematical Sciences) had been asked to consider how teacher education could be more actively engaged in MatRIC. Also we take note of the plenary discussion at the launch conference. ES and SG had agreed that some small research grants to be made available for small scale studies of teaching and learning mathematics within higher education. A new post in the budget was created for this.

The Board approved the creation of small research grants and necessary adjustment to the Budget.

A question arose whether students could apply for research money from MatRIC. It was explained that opportunities already exist within the faculty and in the first instance students should apply to the Institute leader. If the faculty fund is depleted then it may be possible to consider the application within MatRIC, but there would be an additional requirement that any grant would be used to contribute to the mission and goals of MatRIC.

- Calendar for 2014 (Attachment #3) Note change for 10.03.14 because of the visit from Stortingets K-, U-, F-komiteen the NIC meeting was cancelled and MatRIC was presented to the visiting committee.
- 22/14 (a) Report from NTNU Frode Rønning explained that the KTDiM project would start substantially from the autumn. At present the second phase of a project which formed the basis of the proposal for KTDiM, was being carried out in the context of studies in

- a subsequent mathematics module.
- (b) Report from NMBU Margrethe Naalsund reported a meeting between mathematics education and mathematician colleagues at NMBU. There is mutual interest in collaborating for better mathematics teaching, and so, a joint project including various activities in mathematics teaching is now being established. However, some difficulties in communicating meanings between the two groups were experienced. Colleagues working in different fields have different conceptual frames which can make communication in describing and understanding didactical efforts challenging.
- There were no additional items.
- 24/14 (from 10.30) Presentation by Op-design MatRIC profile and logo.

 The presentation lasted 30 minutes. Many designs were shared and through discussion these were reduced to a short-list of eight for further consideration and reflection before a decision is reached.

Next meeting Tuesday 17 June, 13.00-15.00.

Attachment #1 Centre Leader Report

22 March, 2014

Centre leader report for Management Board meeting 26 March 2014

Activity has again concentrated on getting the Centre established and known.

Since the last Centre management Board (19 February 2014).

Appointments

Centre Administrator/Manager: Line Malde has accepted the position and will take up her work on 1 April. Line was able to attend the Launch, I have had an informal meeting with her in Grimstad and we welcome her to this Management Board.

A PhD Fellowship was announced, before the last Management Board. The response was not as strong as hoped so the language requirement was relaxed and the deadline for applications extended.

A post-doctoral position has been announced 14 March (in the newspaper on 19 March) Deadline for applications is 3 April.

International Advisory Board

IAB had its first meeting 11 March 2014. This included a brief presentation of MatRIC, a short private meeting and then an open meeting with members of the management board and others who are active within the Centre. The discussion with IAB explored several issues concerning the clarity, focus and purpose of MatRIC's mission and proposed actions.

Since the IAB meeting there have been further e-mail discussion between members of IAB. The outcome of these discussions have been communicated to me. In summary the advice is to ensure a clear focus on pedagogical/didactical research within the working groups.

Launch conference

My own feeling is that the Launch event was as successful as we had hoped. On the day there were 74 participants (+ administrator and photographer). We had planned for 100, but my goal was 60+. The participants came from UiA (22, 30%), Other Norwegian universities and university colleges (41, 55%), NSMO (5, 7%), NOKUT (2, 3%) and international guests (IAB members, 4, 5%). An evaluation survey was sent out to which there have been 58 responses UiA (31%), Other U & UC (57%), NSMO (5%), NOKUT (1%), IAB (5%). The responses are thus fairly representative of the participants. A report from the evaluation is attached; in summary, in almost every respect around 90% of participants were either satisfied or highly satisfied with the event. The additional open comments provide some useful ideas to work on. It is both encouraging and challenging that 86% of participants believe that MatRIC will make a difference to mathematics teaching and learning in higher education in Norway, the remaining 14% responded that they did not know. The Launch has thus succeeded in presenting MatRIC as something that will be effective, we are now challenged to make it work!

I will repeat our sincere thanks to everyone who contributed to the success of the event and especially to Elisabeth Rasmussen for her excellent effort with the launch.

Special Interest Working Groups

Considerable effort has been invested in preparing presentations of the group activities for the Launch. Evidence of this is available from the MatRIC web.

Effort over the next 5-6 months must be focused on building active working groups.

Following discussions at the Launch, and with IAB it has been decided to announce some small research grants explore teaching and learning – especially related to the activities of the working groups. *This requires a new look at the budget.*

Presentations of MatRIC have been made to:

Since the Management Board on 19 February MatRIC has been presented:

To Stortingets Kirke-, utdannings- og forskningskomiteen when the Committee visited UiA on 10 March. (The planned NIC meeting was cancelled and so the planned MatRIC presentation to NIC did not occur).

- 12 March MatRIC Launch at Gardermoen (see separate item above)
- 21 March Yuriy Rogovchenko and Simon Goodchild presented MatRIC to Professor Johan Lithner and colleagues at Umeå Mathematics Education Research Centre (UMERC). We want to explore some form of association or collaboration between our centres. (http://www.ufm.umu.se/english).

Dissemination & networking

The first MatRIC Newsletter was published in paper and digital versions. The Paper version was distributed at the Launch, the digital version in advance of the Launch. Jan Arve Olsen has been extremely helpful in getting this done.

The film made for Agderkonferanse and presentations at the Launch have been published on the temporary MatRIC web pages. In addition Per Henrik Hogstad has produced a film of his Launch presentation, which is available from the web pages. These have already proved very valuable when presenting MatRIC at Umeå.

MatRIC logo, Centre profile and web pages.

Opdesign will make a presentation to the Management Board on 26 March. (Beginning 10.30). I understand that we will be presented with two logos and outlines of a proposal for the Centre's profile. This is the outcome of two workshops and correspondence between the MatRIC planning group (Cornelia Brodahl, Per Sigurd Hundeland, Ingvald Erfjord and Simon Goodchild) and consultants from Opdesign.

We have received a quotation for the development of the MatRIC web pages. This exceeds the budget agreed in the December meeting so *I will bring this to the Board for approval*. The web-pages and profile are extremely important elements of MatRIC, they represent MatRIC's presence and identity as well as providing the MatRIC's 'throbbing communication heart'.

Other items

The joint (NTNU) KTDiM and MatRIC proposal to run a workshop at the Nordic Mathematics education Research conference (NORMA14) to be held in TURKU, Finland 3-6 June has been accepted. Frode Rønning and Simon Goodchild will coordinate this working group. One goal of the group is to develop a collaborating network that will be in a position to propose a research symposium on teaching mathematics in higher education at the following NORMA conference.

MatRIC conference will be a higher education day joined to the end of the annual 'November Conference' run by the Norwegian Centre for Mathematics Education (NSMO) at Trondheim, 27-28 November 2014. This has now been agreed and announced by NSMO and MatRIC,

Other events are shown in the MatRIC calendar.

Summary:

MatRIC is launched. We are now at the fitting out stage. We have to establish the working groups which do effectively connect mathematics teachers across universities and university colleges. The groups will have both innovative and educational research functions.

Continued work on the web-site is necessary.

We have to develop the plans for the planned events in the autumn – MatRIC meeting at Loughborough, Video seminar in Bergen, Conference in Trondheim.

A concerted effort to publish MatRIC -

Simon Goodchild (22.03.2014)

Attachment #2 e-mail from International Advisory Board

21 March 2014

Dear Simon,

Thank you for a highly stimulating Launch Event. Since the event, members of the Advisory Board have been involved in some email discussion and the message below is from the IAB as a whole not from me alone.

An item has emerged from our discussion that we would wish to pass on to you for your consideration as the SIWGs take shape following last week's event. The IAB feels that it is important that the SIWGs do not just focus on the development of resources but give full consideration to the pedagogical framework in which those resources are deployed. We felt that the emphasis at the Launch event was on the technology and the resources – this quite probably reflects the interests and expertise of the SIWG leaders. We would not in any way want to dampen their very clear enthusiasm but we feel that if the outcomes of the SIWGs are to be transformational on the student learning experience across Norway then the groups have to have a clear focus from the outset on didactics/pedagogy as well as on the technological opportunities that are now available.

We think that it is important that what is developed is not a set of "stand alone" items but rather a total design for the implementation of new approaches to teaching which capitalise on the opportunities that new resources can present. It is also worth considering how to "develop" the HE teaching work force so that staff across the sector are not only aware of, but also feel confident using, new approaches to teaching.

We would suggest that it would be hugely beneficial for it to be clear that each SIWG has as part of its brief didacto-pedagogical elements and that membership of each group should include colleagues with appropriate expertise. The close links between the mathematicians and the mathematics education group at UiA should make this possible although of course it would be great to involve maths educators from around Norway.

In line with the Board's title, this is nothing more than advice and we hope that it will be useful to you.

Best wishes Duncan

Attachment #3 MatRIC Calendar

22 March, 2014

Calendar 2014

January	
9	SIWG Coordinators meeting - Grimstad
14	Oslo – NFR meeting to introduce new FINNUT programme
16	SIWG Grimstad coordinators
21	Trondheim – meetings at NSMO & NTNU
28	MatRIC presentations Kristiansand: Agder Conference – Grimstad: Statsministeren
31	Closing date for applications for Centre Administrator
February	
10	Gardermoen – NOKUT meeting for SFU leaders
13	SIWG Coordinators meeting - Grimstad
14	Yuriy Rogovchenko visits NMBU, Ås to meet with mathematicians and statisticians — and present MatRIC.
17	Bergen – meet with Aasmund Kvamme (study leader for mathematics in engineering programme) at Høgskolen I Bergen
19	Centre Management Board
March	
10	Presentation of MatRIC to Stortingets Kirke-utdanning og forskinings komiteen, Grimstad
11	International Advisory Board – 1 st meeting at Gardermoen
12	Launch conference
21	Umeå – explore links with mathematics centre (Johan Lithner)
21	http://www.ufm.umu.se/english
25	Per Sigurd Hundeland presents MatRIC to nettverk for matematikk i lærerutdanning (a
23	meeting with representatives from every teacher education programme in Norwegian
	universities and university colleges.
26	Centre Management Board
26	Presentation of MatRIC to MNT Forum
April	
1	MatRIC Project Manager (Line Malde) starts. MatRIC invites Grimstad colleagues to
0	coffee to introduce MatRIC and Line Malde.
8	KD Seminar: Hvilket behov har vi for ingeniørfaglig kompetanse i Norge, nå og i
30	fremtiden? LM represents MatRIC Launch of BioCEED 10:00-14:15, i Bergen
30	Laurich of Bioceed 10.00-14.13, i Bergen
May	
6	Realfagseminar Grimstad
14	NFmR – Det Nasjonale fakultetsmøte for realfag
'	http://www.uhr.no/rad_og_utvalg/nasjonale_fakultetsmoter
14	Launch of CEMPE
19-21	MatRIC presentation in Department seminar
June	
3-6	NORMA14 Conference, Turku Finland – Workshop proposed by NTNU & MatRIC (accepted)
17	Centre management Board 13.00-15.00
_·	Q

23-25	SEFI (European Society for Engineering Education)-MWG (Mathematics Working Group) Seminar (Dublin) http://www.it-tallaght.ie/events/MWGSefi 17/index.html
August	
	Target to have SIWGs operational
September	
11-12	Joint meeting MatRIC and Loughborough U. Mathematics Centre at Loughborough, (involved SIWGs)
October	
2 nd half	MatRIC seminar – video teaching – in Bergen
November	
27-28	MatRIC conference Trondheim (+ 2 nd meeting IAB)