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NETWORK A MEETING RECORD

Network A Plenary Meeting March 22-24, 1994, Paris, France

Participants

Friedrich Plank, Austria
Luc Van de Poele, Belgium-Flemish
Marc Demeuse, Belgium-French
Christiane Blondin, Belgium-French
Jean Britton, Canada
Niels Plischewski, Denmark
Pirjo Linnakylä, Finland
Jacqueline Levasseur, France
Jochen Schweitzer, Germany
Chiara Croce, Italy
Jean-Paul Reeff, Luxembourg
Fernando Cordova, Mexico
Arnold Spee, Netherlands
Jules Peschar, Netherlands
Lynne Whitney, New Zealand
Jan Peter Stromsheim, Norway
Glória Ramalho, Portugal
Gertrudes Amaro, Portugal
Guillermo Gil, Spain
Birgitta Fredander, Sweden
Uri Peter Trier, Switzerland
Eugene Owen, Chair
Andreas Schleicher, OECD
Jay Moskowitz, United States
Maria Stephens, United States

Observers and Guests

Jirí Svoboda, Czech Republic
Heiko Laukkenen, Finland
Mary Lindquist, PISA Frameworks
Ann Borthwick, Problem-Solving
Eckhard Klieme, Problem-Solving
Tom Healy, OECD
Fiona Ellerton, OECD

Regrets

Jana Straková, Czech Republic
Gella Varnava-Skoura, Greece
Judit Kádár-Fülöp, Hungary
Michael O'Leary, Ireland
Erich Ramseier, Switzerland

Summary of Relevant Meetings

The following major meetings related to Network A or other international activities were announced:

- TOR/Data Strategy Working Group Meeting, May 6-7 in Washington, D.C.
- QFEG meeting, May 25-26
- PISA Review Meeting, June
- ILSS Open Forum Meeting, June 16 in Paris
- DeSeCo International Symposium, October 14-15

Summary of Major Decisions

The following decisions were taken:

- The Chair of Network A promised to provide members with copies of the Lifelong Learning Framework prepared for the INES Steering Group and BPC members' comments on the dissemination plan to Network A members following the meeting.
- The Network provided guidance to the Network Secretariat for the preparation of the learner outcomes chapter for EAG. The Network supported a hybrid of the proposed models with both national analyses (country profiles) and international analyses that draw upon TIMSS (except Population 3) and IALS/SIALS. A draft of the chapter will be prepared for review at the October Network meeting.
- The Network adopted the work of the APOI group, provided that text is added that clarifies the limits of the questionnaires, provides rationales for the indicators, describes additional data sources, and notes planned changes in the development process.
- The Network agreed that the Data Strategy/TOR group would meet in Washington, D.C. on May 6-7 to provide guidance on the preparation of the TOR, suggesting that in addition to the BPC's requests, the group explore options related to foreign languages and other domains and the incorporation of information technology into PISA.
- The Network will proceed with the preparation of Network A 2000, and members that are preparing chapters must submit their drafts by April 30.

Welcome and Introduction

Eugene Owen opened the meeting and welcomed the Network to Paris. He specifically welcomed new members Marc Demeuse and Christiane Blondin from the French community of Belgium; Pirjo Linnakylä of Finland; and Glória Ramalho of Portugal. He also welcomed returning members Jacqueline Levasseur of France and Uri Trier of Switzerland, and expressed the regrets of other members from Czech Republic, Greece, Hungary, Ireland, Switzerland, and United Kingdom.

Eugene began the meeting by providing an overview of the agenda and noting a new agenda item on the preparation of the terms of reference for PISA's second cycle. The agenda was adopted, as were the minutes from the previous Network plenary meeting in Brussels.

Eugene also called members' attention to additional documents in the back of the briefing book. He introduced the Fact Sheet as an informational brochure on Network A and the GANTT chart and supporting documents as an overview of Network A activities in the context of other international activities. The GANTT chart and supporting document name the leaders, financial supporters, timelines, products, and participants of several international activities. He asked that members take time to review these documents—prepared in reaction to requests from many members—and provide comments to the Network A Secretariat.

OECD Update

Eugene then turned the floor over to Andreas Schleicher who provided an overview of OECD activities relevant to Network A.

EAG and Education Policy Analysis

Andreas began with a report on the status of and future plans for *EAG* and *Education Policy Analysis*. He described the continued success of both publications and wide support for them within the OECD, noting that for the first time, sales through non-government channels exceeded those through government channels.

He also reported that, at their meeting in February, the INES Steering Group spent a great deal of time discussing the future of *EAG* and *Analysis*. The Steering Group concluded that *EAG* should maintain its breadth and depth, but be made more accessible to readers. In that vein, it was suggested that future *EAGs*:

- Be limited to about 30 indicators (raising the issue of what, then, would be the criteria for selecting those indicators);
- Continue focusing on a broad range of domains;
- Focus more on providing insight into trends and developments;
- Leave room (about 1/3 of the material) for innovation; and
- Focus on issues of equity, across the indicators.

One idea for improving the accessibility of *EAG* was to begin each indicator with a cover page abstracting the key findings. Another idea was to include more text synthesizing for the audience the relationship among the indicators presented, which was noted as an area for possible Network A involvement.

Andreas also announced the five chapters being considered for *Analysis*: i) lifelong learning; ii) child-care policy (more qualitatively focused); iii) goals for learning and student achievement; iv) information technology in education; and v) extending the benefits of tertiary education.

He also noted the Steering Group's broad themes of interest for the future: i) lifelong learning; ii) human capital investment and the information society; iii) characteristics of tomorrow's schools; iv) early childhood education and care; v) teacher supply; and vi) financing tertiary education and lifelong learning. He also mentioned that although learning outcomes/achievement is not explicitly given as a current chapter or theme for the future, the Steering Group remains continuously interested in such information.

Andreas also announced that from now on *EAG* will be published in April/May in order to separate itself from the future release of headline results from PISA; take advantage of the new ISCED classifications; achieve greater synergy with *Analysis*; provide more up-to-date data; and take advantage of results of IALS/SIALS. OECD also is looking for ways to make its

dissemination strategies more effective and is working more systematically with the press in countries, with National Coordinators providing the OECD with information on press coverage and contacts within their respective countries.

Implementation of PISA

Andreas also provided a brief overview of the implementation of PISA, for those members who do not serve on the Board of Participating Countries (BPC). He noted that:

- A draft document on the frameworks of the major and minor domains is now available, revised following comment at the last BPC meeting in early March;
- The frameworks for the major and minor domains received wide support, however issues have also been raised about allowing more time for framework development in future cycles of PISA;
- Translation of field trial instruments is currently occurring and several countries have successfully collaborated in their translation efforts;
- There was a Marker Training Session in Brussels at the end of February, which raised several pragmatic concerns about the large numbers of open-ended items (a point the Network may want to keep in mind in its discussion on the next TOR);
- The French Ministry of Education performed a second review of the French source versions of the Field Trial instrumentation, as part of a quality assurance process;
- There will be a major review of the translation and other processes at a meeting in June, to which key stakeholders (including representatives of Network A) will be invited; and
- With two exceptions, all countries have met the minimum requirements for sampling.

Lifelong Learning and Equity

Andreas also mentioned briefly two topics that are under exploration, including lifelong learning and equity. With respect to the former, there now exists a conceptual framework for lifelong learning, although the next steps for further work in this area are yet to be determined. With respect to the latter, Andreas noted that there would be a report on the equity group later in the agenda.

World Education Indicators

Andreas also described the status of the World Education Indicators (WEI) project. Five new countries have joined the project, including: Egypt, Morocco, Sri Lanka, Tunisia, and Zimbabwe. WEI witnessed further expansion as two countries recently held meetings on the development of national indicators systems. Once again, he noted that the project's success would not have been possible without the expertise of INES and the voluntary contributions of member countries.

International Life Skills Steering Group

Tom Healy then provided a brief overview of the Steering Group's comments with respect to the International Life Skills Survey (ILSS) project. He also noted that there would be a more detailed presentation about the project itself later in the agenda.

Three themes emerged from the Steering Group: i) the need for coherence in ILSS vis à vis other work such as PISA, CCCs, and DeSeCo; ii) the need for validity in the instrumentation which is still in development; and iii) the need for political consensus, not just among stakeholders in education, but also those in labor and finance. Tom noted that an Open Forum Meeting was planned for June in Paris in which interested countries could come together to learn more about the project. He also stated that OECD would issue a letter of invitation/information to members of the Education Committee and possibly also to Employment and Education Ministries. A brochure on the project is nearly finalized.

EAG 2000 Indicators

The Network then turned to a discussion on possible indicators for *EAG 2000*. Eugene pointed out the proposal in the briefing book, which was intended to provide a “starting point for thought.” He described the two models laid out in the proposal:

- Model 1 looks at additional analyses (both secondary analyses at the international level and national analyses) and suggests reviewing these additional sources and presenting country profiles. Model 1 takes a less empirical approach but draws upon a wide variety of sources.
- Model 2 is more reminiscent of past *EAG* achievement chapters. Model 2 presents options for indicators that “mine more fully” existing data, specifically suggesting multivariate analyses of TIMSS population 2 data. Model 2 uses old data in new ways.

Eugene noted that division of the proposal into two models was not intended to suggest that they were mutually exclusive, rather it was simply to highlight the distinctions between the two approaches. He also told members that the goal of this session was to get consensus on the indicators and provide direction to the Network A Secretariat to produce a draft for the next meeting. He then opened the floor to comment.

Fritz Plank commented that he supported especially the analyses related to gender and science and requested a return to the possibility of comparisons between Populations 2 and 3. Eugene stated the old problem of response rates and wide age variance in Population 3 that makes comparisons difficult. He suggested that country profiles at this age group may be more appropriate ways to incorporate this data without compromising validity. The Network had a lengthy discussion on these issues, erring in the end to the side of conservatism with respect to Population 3.

Lynne Whitney noted that she could support either model and asked to what extent it is intended for this chapter to fit in with other EAG chapters. To the latter, Andreas said that our chapter could be innovative and did not have to “match” the other chapters. Arnold Spee supported

adding SES/native language to the suggested multivariate analyses. Jochen Schweitzer asked if there was any way to bring out issues of training and classroom climate in Model 1. Pirjo Linnakylä suggested the use of SIALS data and asked if the IEA Computer Study data would be available for this effort, which it will not nor will SIALS. Birgitta Fredander noted a Swedish analysis that looked at gender and item forms, using this example to support the notion of going deeper into data to get useful explanations about performance. Fritz said he would be interested in knowing what the effects of the frequency of assessment have on performance. Jan Peter and Uri both mentioned the usefulness of the chapter's drawing upon multiple sources as a good way to prepare the public for PISA and for making distinctions between studies.

Eugene then summarized what these and other comments seemed to be reflecting: that our chapter, drawing on the proposal, should take a hybrid approach of the two models and should, using TIMSS and IALS/SIALS pose several questions that would be answered first at the national level with country profiles and national analyses or literature reviews and then at the international level with analyses that mirror the former. There was some subsequent discussion. Of note, Jean Britton asked Eugene to distinguish this model from the purpose of the Network A 2000 publication. He described Network A 2000 as a more discursive, thoughtful set of documents the purpose of which would be to assess where we are going and to be prospective—even speculative—without being necessarily data driven. The Network supported the final proposal that evolved.

Update from Projects

After lunch, the Network heard reports from various projects around INES and OECD.

Network C

Eugene provided an update on Network C, which is currently working on its upper secondary school survey. A tender for development work on the survey was released through OECD and a review panel is currently underway. Eugene noted that Jaap Scheerens, the Chair of Network C, will be invited to future meetings of the QFEG to provide links at the questionnaire level between PISA and Network C. Andreas described the content of the Network C survey including: availability and use of technology, instructional practices, quality and quantity of human resources, allocation of personnel to processes, transition issues, and structures/organization. Several members asked questions about planned coordination between PISA and Network C and long-term plans for coordination with Network A. Andreas noted that currently Network C's survey and PISA are on different and parallel tracks. In the future, PISA may draw upon Network C's work as it is useful for its purposes.

DeSeCo

Eugene expressed the regrets of Dominique Rychen (Swiss Federal Statistical Office) who was unable to be present to give an update on DeSeCo. Andreas described progress of this activity in her place.

DeSeCo explores how previous (and ongoing) work in projects such as CCCs, IALS, and Human Capital Investment approach, define, conceptualize, and use notions of competencies. The goal of the DeSeCo project is to define and select key competencies that may form the basis of a framework in this area. A new product will soon be available from DeSeCo, the paper of lead expert Franz Weinert and commentary in response to his paper. Dr. Weinert's paper (as well as papers being currently drafted by five additional experts) examines the questions: Do key competencies exist? Can they be defined? Do they differ culturally? Are they the same throughout life? Are they generalizable beyond the individual context? Are they learnable? An international symposium is planned for October 14-15, which will examine the coherence among the papers of the five experts.

Several members asked questions about the relationship of the DeSeCo work to Network A. In responding, Eugene stated that it is expected that at some point this work will come back to Network A as a product (e.g., a framework for work in competencies), it is just a matter of when that product will be ready. One member also asked about who would be invited to participate in/attend the international symposium. Eugene said that the issue was undecided, noting that at one point there had been talk of opening the meeting up to wide participation.

ILSS

Jay Moskowitz provided an update on progress of the ILSS project since the Network last heard about it in Brussels. He noted that the development teams are currently working with the same seven domains described in Brussels—literacy (2), numeracy, problem-solving, teamwork, information technology, and practical cognition—but that they were in various stages of development. The former three are in item development. The latter (with the exception of practical cognition) are in feasibility stages; and practical cognition is at the pre-feasibility stage.

Jay reported that, in January 1999, the ILSS project held an “All Hands” meeting in which all stakeholders and developers came together to discuss progress, and the outcome of the meeting was a delay in the timeline. It was decided that all feasibility studies must be completed by September 1999. In January 2000, participants will take a decision on which domains should be included in the project. The Field Study would then be conducted in 2001 and the Main Study in 2002. Four countries are participating in *and* funding the project: Canada, United States, Luxembourg, and Sweden. Four additional countries have expressed interest in joining the project: Germany, Netherlands, Switzerland, and United Kingdom. Jay noted that any countries interested in participation should contact either Scott Murray at Statistics Canada or Marilyn Binkley at U.S. National Center for Education Statistics for more information.

Several meetings related to ILSS are planned:

- March 23, Problem-Solving
- April 16, Background Questionnaires/Analysis Plan
- April 26, Prose/Numeracy
- June 16-17, Advisory Group

The sample size for the study is 7,000 adults aged 16-65. The U.S. and Canada will sample 20,000 students in order to have national, as well as international, comparisons.

One member asked about planned or likely similarities between ILSS and PISA problem-solving components. Eugene noted that there was little overlap because of the different constraints on test specifications and different populations in the two studies. Another member asked if there was any integration of domains in ILSS, which there is not. Finally, one member asked if members could be provided with a brief abstract about the project. Eugene mentioned that the brochure was being finalized. Also, there is a brief description of ILSS in the GANTT chart and supporting documents.

Equity

Marc Demuese provided an update on the Ad-Hoc Equity Group. From the April 1998 meeting of the INES Steering Group, equity emerged as a clear priority. Thus, an ad-hoc group was formed to explore developments in equity for the INES project. At a first meeting, members of the group listened to several presentations and discussed what types of equity-related indicators are of interest. At a second meeting, representatives of 8 countries discussed issues of common language and terminology. The group is aiming to prepare a publication for the General Assembly in 2000.

Eugene clarified the distinction in the role of INES Networks and that of ad-hoc groups. The Networks have a charge to develop indicators and are largely representative of OECD countries. The ad-hoc groups are reflective groups with no permanent constitution. The point of the ad-hoc groups is to produce conceptual work that the Steering Group can then bring back to the Networks for further development. Uri clarified that the point of this particular ad-hoc group was to take first steps to introduce dimensions of equity into existing indicator work.

PISA Framework

On the morning of the second meeting day, Eugene welcomed Mary Lindquist, from Columbus State University, to provide an overview of the PISA framework. Mary began by describing her intent to provide the Network with a fresh, “outside” perspective on the PISA framework and to contrast them with those for TIMSS. She described the information goals of PISA and noted a few of its key features (e.g., age of the population, participating countries). She remarked that PISA’s focus on understanding and using information was an extremely important and innovative distinction that is, at the same time, very difficult to assess successfully.

Mary also talked about the background questionnaires and self-regulated learning components. With regard to the former, she noted that curriculum information, currently absent, would be the information of greatest interest to teachers. With regard to the latter, she hypothesized that these attributes were likely to be embedded in content or context—she provided an example of the effect of context on a student’s understanding of a math item (i.e., the concept of a pizza as a slice versus a whole pie). Mary also reviewed the definitions of literacy for reading, mathematics, and science in the framework and suggested a need for some commonality of

language in the future. She also remarked that, again, she appreciated the focus on understanding.

In discussing some challenges, Mary noted that:

- Frequency of assessment is an important issue (especially with older students) and may have detrimental effects on the motivation of students—“the items alone won’t do it;” and
- More research is needed about the effects of contextualized items on individual groups versus individual students.

With regard more specifically to some interpretation challenges, she stated that:

- It may be useful to consider having, in the future, an abbreviated version of the frameworks that uses a common language across the definitions; and
- When reporting results, analysts should be clear about the lack of information, or the limits of the information, on instruction and curriculum.

Finally, she suggested that two possibilities for the future might be: a workplace study and more careful attention to the use of technology in the domains. In conclusion, she remarked that the simultaneous assessment of three domains in the PISA study is a real strength that will allow the education community to say and learn some new things.

Following Mary’s presentation, many members voiced their appreciation and posed questions to her. One issue of note was how to bring the study “back to the classroom.” Suggestions ranged from having specially mandated pieces of research related to PISA to using existing national sources of information to conducting interviews with participating teachers.

APOI Update

Jochen Schweitzer then provided an update on the activities of the APOI Working Group, which met in January in Washington, D.C. Before turning to a review of the recommendations of the group (summarized in the minutes of the meeting, behind Tab 1 of the briefing book), he asked the Network to keep in mind that the group had the following constraints:

- They had no opportunity to influence the field trial instruments;
- They had no results from testing of the items to inform their thinking; and
- There was no final framework at the time.

Jochen explained that the recommendations suggested by the committee were then directives for possible changes following the field test, or guidance for decisions once item functioning analysis occurs.

Members then discussed the recommendations and asked questions about the process and why certain decisions were taken. For instance, Lynne Whitney asked what the criteria were against which the items were prioritized and Birgitta Fredander asked about the change in priority regarding parental involvement and principals' allocation of time. Fritz Plank, who was a member of the APOI group, answered some of the questions by noting that the recommendations represent not a shift in focus, but a shift in thinking on what is possible given the current instrumentation. With regard to the latter question, Eugene remarked that it was not a de-emphasis on the importance of information on parental involvement, but rather a request that the nature and type of activities be made more useful to 15 year-olds. He also noted that the Network C survey could provide some information regarding principals' time. More broadly, he noted the concern—that, in part, the APOI group was responding to—that items focused on a point in time are counterproductive to the focus of PISA, which aims to explore the cumulative yield of a student's experience.

Other major points raised included some members' desire for more specificity in the indicators planned. Lynne also commented that the Network should clarify its role with regard to the questionnaires and PISA analysis as reactive versus strategic.

Eugene summarized in suggesting that the work be adopted with the following additions:

- A preamble that succinctly specifies what the questionnaires will give us and what they will not;
- A rationale/implications for the proposed indicators; and
- A description of the role of additional data sources.

Uri added that perhaps the paper could include a brief reflection on what changes are planned for the questionnaire development process. Eugene also noted that the Network will revisit the reactive/strategic issue in the future. The Network agreed with this plan of action. The Network Secretariat agreed to make the revisions to the APOI document, and it was noted that the questionnaire advisors would meet at the end of the May to discuss next steps for the questionnaires and indicator development. The Network will be represented at this meeting.

Preparation of the Terms of Reference

Eugene then introduced a new topic on the agenda, a discussion on the preparation of the Terms of Reference. In his introduction, Eugene noted that the BPC had made several requests of Network A—to explore options for additional age groups and for a longitudinal component. Eugene announced that a Data Strategy/TOR Working Group meeting would be held on May 6-7 in Washington, D.C. to plan for the preparation of the TOR and exploration of the options, in order to meet the deadline of a draft by the October BPC meeting.

Guillermo asked if Eugene could clarify the scope of changes that can be introduced into the new TOR, which raised an excellent point. The working group has *both* the TOR and overall Data Strategy under its purview—that is, in exploring the options and preparing the draft TOR, the

group itself will have the responsibility (as members of Network A) to think in terms of the coherence of the long-term Strategy.

Fritz asked what evaluation information the group would have to draw upon and when it would be available. Andreas noted that the only information that will be available during the preparation of the TOR will be regarding implementation—gained from a meeting of PISA stakeholders in July—not on the relative value of the components of the overall Data Strategy.

A lively discussion ensued and members voiced their opinions regarding the options called for by the BPC and adding their own, as well. Consensus was reached on several issues fairly easily:

- A core set of domains (reading, math, and science) should be maintained in each cycle of PISA.
- Problem-solving should be a CCC component for 2003.
- The context questionnaires need improvement and more attention in the next TOR.

Eugene called for more discussion on issues on which consensus was unclear: the longitudinal component, level of Network A's involvement (*vis à vis* the contractor) in more precisely specifying development work, additional age groups, foreign languages or other additional domains, and information technology.

Jules Peschar noted that Eugene's summary should also include self-regulated learning as a regular CCC component and suggested revisiting Civics as a CCC component depending upon the lessons learned in the implementation of the IEA Civic Education Project. Members of both Belgian delegations warned of the danger of overloading the Strategy with options, preferring a more targeted, well-planned core of activities. Uri stressed the importance of incorporating information technology and foreign languages as options into the next survey cycle. These sentiments were echoed by Birgitta and Fritz. There was less consensus around the option of a longitudinal component and little consensus around the additional age option. Jay suggested that members give thought to including dissemination as an activity of the contractor in future cycles.

PISA Dissemination Plan

Eugene then described the dissemination plan drafted by the OECD Secretariat for PISA. He described the multi-level approach to reporting, with headline results being released first, followed by more targeted analyses focusing on particular topic areas. Most members supported the multi-level approach. Jean Britton, who was also supportive of the approach, voiced a warning that the Network take care that data released in the headline report are truly the beginning of a continuing story that can be adequately backed up in later analyses. Eugene also noted that the Network/BPC should remember Mary Lindquist's reminder that teachers are an important audience for this information, as well. Finally, he took the comment that perhaps the Secretariat should consider establishing a clearinghouse of nationally published information on PISA. Eugene offered to circulate the BPC's comments on the dissemination plan to Network A members.

Translation Reporting

The Network then had a brief discussion about linguistic equivalence and cultural appropriateness issues with regard to the PISA tests. The documents in the briefing book described the consortium's plans regarding reporting on these topics. Uri questioned the purpose of the discussion, suggesting that the Network was not in a position to take a technical judgement on the quality of the consortium's work in this area. Eugene suggested that the purpose of the session was simply to raise any issues relevant to translation in which Network A had a potential role. Several members suggested that ACER undertake analyses following the field test regarding the equivalence of the two source versions. Eugene also suggested that ACER explore the use and effects of national adaptations.

Network A 2000

As a final activity for the second day, Eugene reviewed members' commitments to preparing chapters for the Network A 2000 volume on the future of indicators. He announced that Spain would be collaborating with the United States on the preparation of Chapter 1. He also announced that France intended to prepare a chapter on methodological assumptions of unidimensionality and that there would not be a chapter on DeSeCo in our publication, as they intended to produce a separate publication. Luc Van de Poelle announced that Belgium-FL needed to reconsider participation. Lynne announced the continued support of New Zealand and continued efforts to find an author for the reading literacy chapter. Fritz and Gertrudes Amaro both announced that their chapters may require a mini-survey component and asked the cooperation of their colleagues in providing information.

Eugene stated that countries must submit drafts of their chapters by April 30 (with possible exceptions for New Zealand and the survey components in Austria and Portugal's chapters). As a final note, Jay asked that volunteers submit their draft chapters in Word.

Problem-Solving

On the meeting's final day, Eugene welcomed presenter Ann Borthwick, who is conducting the Network's problem-solving development activity, and guest Eckhard Klieme, who is involved in the problem-solving components of ILSS and the German national option in PISA.

Ann began by describing the documents that were included in the briefing book: the preliminary map of the field and the preliminary annotated bibliography. In her comments, she noted the two main distinctions in the field of problem-solving—applied and academic work—and their further divisions into research areas such as complex problem solving, cognitive psychology, or life skills. She highlighted that the bulk of literature focused around European traditions in complex problem-solving and North American traditions in cognitive psychology.

Ann emphasized that she needed the Network's input on the following question:

- Are these the correct fields?

- Are there researchers that are not represented?
- Are there other cultural/language traditions in problem-solving that are not represented?

Ann also described that there appeared to be several “open questions” related to problem-solving that the Network would have to address. The first of these is: why bother with a problem-solving assessment at all? The second of these is: is problem-solving a cross-curricular competency at all, or is it simply embedded in specific domains. From her review of the literature, she concluded that there is little research that determines whether problem-solving is distinct from other skills such as reading literacy, and there are many researchers who would likely believe that it is not or who would support that it is highly dependent on content knowledge. However, Ann emphasized that the openness of these two questions should not stop the Network from proceeding with their work. The questions are not definitively answerable, and the Network’s activity provides an important opportunity to explore the questions further.

Finally, Ann described the four core components of problem-solving—problem-solver, problem, context, solution—and examined the literature in light of each. She also posed an important question for the Network to consider—a question she thought could help focus their thinking as they approach a decision point in October: What is it that we want to know? For instance, is it between student differences in problem-solving strategies; student performance on different types of problems; student performance on different steps of a problem. Furthermore, where on the dimensions described in the presentation should the Network’s problem(s) fall?

The latter point highlighted the need for face validity—the policy maker audience must have a positive initial and instinctive reaction that the measure is addressing what they perceive of as problem-solving, which is a fairly difficult task in this cross-national setting. Ann also hypothesized that student motivation would be a major difficulty the Network would have to face in developing measures and suggested minimizing the information processing requirements of the problem and focusing perhaps on different parts in different problems.

Finally, in discussing next steps, it was suggested that a workshop be held in the summer. An initial idea was to gather prominent researchers in the field to discuss and make some suggestions for specific assessment tasks, using examples from existing tests. However, following on some of the group discussion and reaction to Ann’s presentation it was suggested instead that there be a workshop/meeting on possible criteria for the development/acceptance of assessment tasks (e.g., as Jules suggested, linkage to indicators, relevance for later life). Looking a little farther down the road, there will likely be a meeting once data from the field trial of the German national option for problem solving is available. Thus, by the next meeting, Ann will be able to present a more complete map that reflects the outcomes of the workshops/meetings and which will have assembled some preliminary tasks.

Next Meeting

The dates for the next meeting were set for October 27-29 in Luxembourg.

Appendix 1: Summary of CCC Field Test Analysis Discussion

Following the plenary meeting, there was a brief meeting of countries participating in (or otherwise interested in) the CCC/Self-Regulated Learning option. Jules Peschar gave a presentation on planned next steps for the analysis of data from the field trial and initial thoughts on an analysis plan, and there was a lot of discussion about this important final phase. The meeting concluded that the Network A Chair would take responsibility for developing an analysis plan and an infrastructure for analyzing and reporting the findings and preparing recommendations for the final instrument. In doing so, he will draw upon the expertise of Jules and staff at the University of Groningen and Jürgen Baumert and staff at the Max Planck Institute in Berlin. Belgium-FL, Germany, Netherlands, and Norway are providing financial support.