Sharing is multiplying | Anke Noordhoek
Knowledge sharing

A research and advice on how events can contribute to knowledge sharing at bureau NoorderRuimte

In command of Ms. M. Post in the framework on how events contribute to knowledge sharing at bureau NoorderRuimte, Kenniscentrum NoorderRuimte

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Knowledge is nothing without sharing

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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bNR</td>
<td>bureau NoorderRuimte</td>
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<td>COI</td>
<td>Community of Interest</td>
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<td>COP</td>
<td>Community of Practice</td>
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<td>FM</td>
<td>Facility Management</td>
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<td>FMIS</td>
<td>Facility Management Information System</td>
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<td>HG</td>
<td>Hogeschool = University of Applied Sciences</td>
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<td>HT</td>
<td>Human Technology</td>
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<td>IBK</td>
<td>Institute of Business Administration</td>
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<td>IFM</td>
<td>International Facility Management</td>
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<td>KC</td>
<td>Kenniscentrum = Knowledge centre</td>
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<td>KCNR</td>
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<td>Q&amp;A</td>
<td>Question and answer</td>
</tr>
</tbody>
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Executive Summary

What led to the drafting of this report?
Kenniscentrum NoorderRuimte (KCNR) – NoorderRuimte, is the centre of applied research and innovation for area development at the Hanze University of Applied Sciences, Groningen. The mission of NoorderRuimte: ‘NoorderRuimte, develops and shares expertise about area development in the north of the Netherlands by carrying out applied research based on real-life issues which meet future needs that fit the demands and needs of tomorrow’.

Bureau NoorderRuimte (bNR) is part of KCNR and has still some room for improvement and has to develop further. It is a learning- and work place where students, lectors and researchers work on applied practical cases that are initialized by NoorderRuimte or the involved external environment. This is the first year in which this way of working is applied. In February 2013 the organization started with the first batch of students who could do a research oriented placement or graduation placement. The group consists out of around 30 students wherefrom most (hopefully) graduate coming July 2013. Within bNR knowledge sharing and the development of students is the focal point, students and lectors of many disciplines work come together and work coin jointly. As a new organization the emphasis within bNR will lie on the further development of the centre and making room for improvements. The methods and theory that bNR currently employs will be analyzed in order to come to an advice on how bNR should develop further in the area of Knowledge Sharing.

An important question is; how can knowledge sharing be optimized at bNR? Several research projects on this topic were handed out to students to obtain insights on how the knowledge sharing culture and behavior can be optimized at bNR. This research is one of these projects and focuses on knowledge sharing through the events bNR hosts. The objective of this research is to create a good basis for the organization of knowledge sharing events in a responsible and creative way at bNR in the future.

This research is based on the following main research question: How can physical events contribute to knowledge sharing within bNR?

In order to answer this question several methods of research have been used:
- Literary research on five selected domains – knowledge, knowledge sharing, motivation, events and knowledge sharing events.
- Desk research to analyze the available information of bNR – organization descriptions, the vision document and knowledge sharing event methods.
- Qualitative research by means of orientational interviews and short open interviews. The involved people at bNR; the students, the coaches and the executives have been the interviewees.

These results are combined in a SWOT analysis and applied to the organization. Based on these research results conclusions are drawn and finally recommendations are ensued therefrom.

Results of research
Key words: knowledge, knowledge sharing, motivation, events and knowledge sharing events

From the literary research it appears that the knowledge and knowledge sharing of bNR is subject to the collective (common, joint) and motivational perspective. The collective outcomes of knowledge sharing are more valued by the organization of bNR because it is part of their core business. However the students of bNR are focussed on their personal goals and development which is a motivational perspective. This causes a latent conflict of interest between bNR and the students.
Every kind of event has its own methods and outcomes. What should be achieved with the particular event needs to be articulated and thought true beforehand. The type of knowledge (tacit – explicit) that has to be shared will be referred back to the theory of Nonaka and Takeuchi (1995). The expected advantages for knowledge sharing do not always show while the chosen event method is not beneficial. It is therefore imperative that a format is chosen at forehand and customized to the specific event type.

In the desk research the knowledge sharing event methods of bNR have been analyzed in accordance with the theory of Nonaka and Takuchi (1995). The methods from the theory are being implemented and taken into consideration but are not working as they should be. A few reference points of the vision of bNR are not developed yet however this might also be because of the fact that bNR is a newly founded organization. From these outcomes recommendations on how to approach it differently will be formulated in chapter five.

The qualitative research outcome shows that the involved people have a lot to say about the current knowledge sharing output of bNR. The lack of structure, an individualistic culture and poor attendance of people were the main negative points that came out of the interviews. However the interviewees did express they were content with the fact that knowledge sharing events were organized. They would like to see in the future more transparency and more obligatory events so the attendance of people will be secured.

Conclusions

- The format of the knowledge sharing event must accurately fit to the sort of knowledge (tacit- or explicit) that has to be shared. Careful preparation is important in order to protect the knowledge sharing process. This typically belongs also to the field of Facility Management because when the physical aspects of the event hamper the purpose of knowledge sharing itself can be jeopardized.

- Intrinsic motivation of the involved people is an important aspect. The current knowledge sharing events need to be more in balance and structured to get people more involved and motivated and they should clearly see what is in it for them. Finding out what stimulates the intrinsic motivation of people needs to be researched further to enable bNR to get more answers on the matter.

- The expected advantages for knowledge sharing do not always emerge because of wrongly chosen methods. When the method of choice is incorrect the expected outcome will not be established, even if the event is prepared and executed perfectly.

Recommendations

- Organize an event at the end of the semester where students can present their research findings. From these findings new research projects could be formulated or continuation on the subject can be advised.

- bNR should consider exploring other knowledge sharing event methods because they can create new opportunities in the field of knowledge sharing. See appendix V for examples.

- It is recommended to bNR to implement obligatory knowledge sharing events to increase the overall involvement and to improve the quality of work. By for instance having all students host a lunch&learn meeting or give a pitch (short powerful presentation) regularly.

- Recommendations are also given on how to fine-tune the currently employed methods in the knowledge sharing events. (see table K in chapter 5.3)
Preface

In the framework of my study International Facility Management at the Hanze University Groningen I had to perform a graduation placement, mine took place in the period of February – June, 2013 at bureau NoorderRuimte. This graduation thesis is the formulation of a research and advice on how knowledge sharing can take place by means of events at bureau NoorderRuimte. The research is in assignment of Mirjam Post – Coordinator of bureau NoorderRuimte.

Knowledge sharing is a very broad topic on which a lot of information is available. Very soon in the process I discovered that knowledge sharing is very complex and can be looked upon from multiple perspectives. At first this research brought more questions than answers, but as the research progressed I have been able to apply it to the situation of bNR.

I would like to use this opportunity to thank a few people who have part in the formalization of this thesis. At first, I would like to thank my family and friends for their love, support and good advices. Secondly Mirjam Post – Coordinator bureau NoorderRuimte, I am very grateful that she gave me a lot of opportunity to participate in the organization of multiple events and that she guided me through my research process. Next to Mirjam, I would like to thank all the other students and coaches of bureau NoorderRuimte who were always open to share knowledge, answer my questions and made my graduation an interesting and fun experience.

Last but not least I would like to thank Irene van der Werff my graduation tutor who supported me through the whole semester with patience and good advices. Also a special thanks to Trude Roelofsen, who has been my ACP tutor since IFM year 1, for her unconditional support.

This research has been exiting and fascinating most of the times, frustrating and disappointing at other moments. However, I feel very privileged that I have been able to go through this process. Eventually, it has resulted in this thesis that you are about to read.

I have learned how to translate the complex topic of knowledge sharing into practical advices for bureau NoorderRuimte. Also I learned that knowledge sharing can take place any time and any where whenever you bring people together.

Anke Noordhoek
Groningen, June 2013
Table of Contents
Glossary .............................................................................................................................
Executive Summary ..............................................................................................................
Preface...............................................................................................................................
1. Introduction .................................................................................................................. 1
2. Method of Research .................................................................................................... 3
   2.1 Method of Preliminary Research ............................................................................ 4
      2.1.1 Orientational literary research ...................................................................... 4
      2.1.2 Orientational Interviews .............................................................................. 4
   2.2 Objective & Research questions ............................................................................ 4
   2.3 Method of Main Research .................................................................................... 4
      2.3.1 Literary Research .......................................................................................... 5
      2.3.2 Desk Research .............................................................................................. 5
      2.3.3 Qualitative Research ..................................................................................... 5
      2.3.4 SWOT analysis ............................................................................................ 6
   2.4 Method of Implementation .................................................................................... 6
3. Results of Preliminary research .................................................................................... 7
   3.1.1 Orientational literary research ........................................................................ 7
   3.1.2 Orientational interviews ................................................................................ 7
   3.1.3 Conclusion of the orientational research & interviews .................................... 8
   3.2 Objective & Research questions ........................................................................... 9
      3.2.1 Objective ...................................................................................................... 9
      3.2.2 Research questions ...................................................................................... 9
   3.3 Relevance of research .......................................................................................... 10
   3.4 Demarcation ......................................................................................................... 11
4. Results & Conclusions of Main Research .................................................................... 13
   4.1 Literary Research ................................................................................................. 13
      4.1.1 Theory on knowledge sharing ...................................................................... 13
      4.1.2 Theories & Models on knowledge sharing .................................................... 18
      4.1.3 Conclusions on the literature of knowledge sharing ..................................... 19
      4.1.4 Theory on Events ....................................................................................... 20
      4.1.5 Conclusions on events ................................................................................ 22
   4.2 Desk Research ....................................................................................................... 24
4.2.1 bureau NoorderRuimte (bNR) ........................................................................................................ 24
4.2.2 Knowledge sharing event methods at bNR .................................................................................. 27
4.2.3 Target groups of bNR .................................................................................................................. 30
4.2.5 Conclusion of desk research ........................................................................................................ 30
4.3 Qualitative Research .......................................................................................................................... 33
4.3.1 Short open interview outcomes .................................................................................................... 33
4.3.2 Conclusion of qualitative research ................................................................................................. 33
4.4 SWOT analysis ................................................................................................................................... 35

5. Conclusion, Recommendation & Implementation .................................................................................. 36
5.1 Conclusion .......................................................................................................................................... 36
5.2 Discussion .......................................................................................................................................... 37
5.2.1 Follow-up research .......................................................................................................................... 38
5.3 Recommendations ............................................................................................................................. 39
5.4 Implementation .................................................................................................................................... 40
5.4.1 World-café on nature visions of Xporelab of the Provincie Drenthe 16-05-2013 .......................... 41
5.4.2 Mini-symposium on Knowledge Sharing 20-06-2013 ................................................................. 42
5.4.3 International Conference of Energetic Restoration – Lower energy in historical buildings 19-09-2013 ......................................................................................................................... 44

6. Critical reflection ....................................................................................................................................... 47

Bibliografie .................................................................................................................................................. 49
Appendices .............................................................................................................................................. 2
Appendix I: Orientation Interviews ........................................................................................................ 2
  Interview with Mark Mobach – Lector Facility Management ............................................................... 2
  Interview with Rixt Froentjes – of Communication Kenniscentrum NoorderRuimte ...................... 4
Appendix II: Knowledge sharing Mind-map ............................................................................................ 6
Appendix III: Theory of Nonaka and Takeuchi ....................................................................................... 7
Appendix IV: Short open interviews ....................................................................................................... 10
Appendix V: Face-to-face knowledge sharing methods ......................................................................... 23
  Face to face meetings ......................................................................................................................... 23
  Open space ......................................................................................................................................... 23
  World café ......................................................................................................................................... 23
  Knowledge fair .................................................................................................................................... 24
  Chat or talk shows .............................................................................................................................. 24
  Yellow pages ....................................................................................................................................... 24
  Speed geeking ...................................................................................................................................... 25
  Samoan circle ....................................................................................................................................... 25
  Line-up............................................................................................................................................... 26
  Icebreakers ......................................................................................................................................... 26
  Group facilitation ................................................................................................................................. 27
  Graphic facilitation ............................................................................................................................... 28
  Dotmocracy ......................................................................................................................................... 28
  Fish bowl ............................................................................................................................................ 28
  DeBnos six thinking hats .................................................................................................................... 28
  Peer Assists ......................................................................................................................................... 29
  After Action Reviews ......................................................................................................................... 31
  Retrospect .......................................................................................................................................... 32
Appendix VI: Virtual knowledge sharing ............................................................................................... 34
  Online Communities .......................................................................................................................... 34
Appendix VII: Draaiboek wereldcafé 16 mei in Bureau NoorderRuimte .............................................. 36
Appendix VIII: Invitation Mini-symposium ............................................................................................ 50
Appendix IX: Programme International Conference ............................................................................. 52
Figures

- Figure 1: Method of research
- Figure 2: Research projects division on knowledge sharing within bNR
- Figure 3: Levels of knowledge sharing
- Figure 4: Layers of the parties involved with knowledge sharing of bNR
- Figure 5: Knowledge process value chain
- Figure 6: Contents of knowledge created by the four modes + knowledge spiral
- Figure 7: bureau NoorderRuimte – Kenniscentrum – study courses
- Figure 8: KCNR – bNR – student
- Figure 9: An overview on the combination of the work field, research and learning
- Figure 10: Division of layers bNR
- Figure 11: Monitoring aspects TMQIO of a project

Tables

- Table A: Knowledge definitions
- Table B: Metaphor of a cake
- Table C: Different ways of sharing information
- Table D: Two types of knowledge – Tacit & Explicit
- Table E: Definitions on events
- Table F: Knowledge sharing events
- Table G: Events for knowledge sharing
- Table H: Conclusions of the current knowledge sharing event methods of bNR
- Table I: SWOT analysis on knowledge sharing at bNR
- Table J: Main research conclusions
- Table K: Interpretation and discussion on conclusions
- Table L: Recommendations for knowledge sharing events at bNR
- Table M: TMQIO World-café
- Table N: Blueprint mini-symposium
- Table O: TMQIO Mini-symposium
- Table P: TMQIO International Conference

Appendices

- Appendix I: Orientational Interviews
- Appendix II: Knowledge sharing Mind-map
- Appendix III: Theory of Nonaka and Takeuchi
- Appendix IV: Short open interviews
- Appendix V: Face-to-face knowledge sharing methods
- Appendix VI: Virtual knowledge sharing
- Appendix VII: Draaiboek wereldcafé 16 mei in Bureau NoorderRuimte
- Appendix VIII: Invitation mini-symposium
- Appendix IX: Programme International Conference
1. Introduction

"Knowledge sharing is multiplying"; however this is far easier said than done.

This research report has been written in the framework of graduating at the Hanze University of Applied Sciences, Groningen, from out the study discipline International Facility Management. In assignment of bureau NoorderRuimte (bNR), within the research theme ‘fundament knowledge sharing’ it is researched what the role of events are while sharing knowledge at bNR. Therefore, the subject of this thesis is; knowledge sharing by means of events.

BureauNoorderRuimte (bNR) is a newly set up organization within Kenniscentrum NoorderRuimte (KCNR) and has been up and running since February. KCNR is a research centre with a focus on area development. At bNR students work on their research skills and/or graduate by doing their (graduation) placement semester. In order to realize this process a learning- and work environment has been created where knowledge sharing and the development of students is a central aspect of the organization. Education and the work field are brought together by incorporating applied research projects for students from multiple study disciplines.

This research focuses on how knowledge sharing can take place at bNR optimally by means of events. The following research questions have been formulated in order to research this.

Main research question: How can physical events contribute to knowledge sharing within bNR?

Sub-questions:

1. What is knowledge sharing?
2. What are (knowledge sharing) events?
3. How can knowledge sharing ideally be represented in events at bNR?

Knowledge sharing is a complicated topic and can be looked upon from many different angles. How do you know that knowledge is shared and whether it is effective or not? Several ‘knowledge sharing’ events already exist at bNR, but is this really knowledge sharing or just a transfer of knowledge? In order to get answers on these questions and give recommendations this research has been conducted.

Reading instruction

In the next chapter the method of research will be described. While in this chapter the chosen methods, theories and approaches of the research are explained. Chapter three describes the results from the preliminary research which consist out orientational literary research and the outcomes or the orientational interviews. Moreover the objective and research questions are formulated. And finally, the demarcation and relevance of research is explained. The main research results can be found in chapter 4. By means of literary-, desk- and qualitative research this research is approached. From these research results a SWOT analysis has been created. In chapter 5 the final conclusions are stated including a discussion and advice for follow-up research. Recommendations are given and how
to implement proposed events. The final chapter of this research is chapter 6 the reflection. In the chapter a personal and critical reflection is incorporated. Moreover, the developed competences during the graduation semester are reflected in here.

The appendices are displayed in a separate appendices report. In appendix I the complete orientational interviews are out written. Appendix II visualizes the knowledge sharing mind-map where this research have started with. Appendix III gives in-depth information on the used theory of Nonaka and Takeuchi with the focus on the different modes. By means of an article the knowledge aspects are described. Appendix IV the total outcomes of the short open interview can be found. A table with the summarized outcomes is displayed first. Several new face-to-face knowledge sharing methods that could be applicable to bNR can be found in chapter V. Appendix VI gives insight into virtual knowledge sharing methods and these could be applicable to a suggested follow-up research. Appendix VII presents the plan of approach and summary of the implemented world-café at bNR. The final appendix is the invitation of the mini-symposium which gives insight how this day will be organized and which topics are involved.

In order to create some clarity on the topic the following explanation on knowledge and knowledge sharing is formulated by Boer (2005):

At first, it is difficult to define what the meaning of knowledge sharing is. Both the concepts of knowledge and of sharing are hard to capture. Secondly it is hard to get a clear picture of knowledge sharing, since a substantial part of the process is cognitive (concerning what happens in peoples mind) and therefore abstract in nature. Usually, no outward or visible observable signs exist showing that knowledge sharing is happening. Consequently, it is hard to determine if knowledge is being shared and when. For example, is knowledge being shared during a conversation, at the moment when ‘one sees the light’, somewhat later, or when one actually behaves in line with the knowledge being shared? It is also difficult to determine what knowledge is exactly being shared and how, since people are commonly unaware of what they already know and what they share. (Boer, 2005)

Key issue
The introduction answers the what, why and how question of this research and gives insight on how the report will be structured. In the next chapter the methods of research will be clarified and this will be followed by choosing the methods that are appropriate for the specific way of research.
2. Method of Research

The research-model in the figure here below is the schematic visualization of the research approach and gives a clear insight in the steps that have been taken during the execution of this research project.
The research questions are answered after that primary- and secondary research has been performed. The primary research consisted of qualitative research in the form of short open interviews. The secondary research consisted out of desk- and literary research in the form of orientational literature research and in-depth research.

2.1 Method of Preliminary Research
In this sub-chapter the method of the preliminary research is described. This preliminary research was needed to get acquainted with the research topic and the organization. A pre-literary study has been executed on knowledge sharing and the organization of bNR. In this same phase a few orientational interviews have been carried out with involved people of bNR to collect information, opinions and experiences.

2.1.1 Orientational literary research
The choice for doing orientational literary research was based on the large amount of available literature on the research subject. By use of pre-literary research the topic of research; knowledge sharing, has been more defined. This has been done by going through documents of the organization that were available and previous research projects that were available at bNR. Next to that research has been done, by looking into books, articles and former research about knowledge sharing from outside the company. This method of preliminary research could be done as well as online as by reading hard-copies.

2.1.2 Orientational Interviews
In order to get to know the organization better and what knowledge sharing means for KCNR and bNR several orientational interviews were done with people of KCNR. These interviews have been in the form of qualitative research at a very early stage in the research. This method was chosen because these people have the information and experience on how things have been arranged previously in the organization and what the plans are for the future for KCNR and bNR. This type of information was needed because the real situation of the organization came to light.

2.2 Objective & Research questions
After the execution of the orientational research on the research topic; knowledge sharing, the research questions and objective could be formulated. The research questions function as the red thread of this research. The central definition of the problem it should give answer to the main research question at the end of the research. The central question is in cohesion with the objective of the research. The sub-questions have been formulated to answer the what, who, where, when and the context of research. The research questions are in line with the objective of the research.

Why will this research be executed and what does it bring to the table? These are questions that had to be answered to formulate the objective of this research. A good objective consists out of the following parts; a central formulation of the research topic which is not too specific, indication of the research-type and relevance of research. Also a specification of the goals and wishes of the client is part of the objective.

2.3 Method of Main Research
This main research part consists out of literary-, desk- and qualitative research. These methods are used to get to the bottom of knowledge sharing and events in organizations and what applies and
could apply to bNR. By means of these methods of research the research questions could be answered.

2.3.1 Literary Research

Literary research is essential to every research project to find out if previous analysis has been carried out on the subject. In this case it is done to determine if previous thesis-projects about knowledge sharing have been written already and if there is other information about the topic available. Literary research has many levels such as documents on macro level for instance policy documents and also information on individual level (micro).

The literature used in this research has been found in articles and research reports via the internet. Research results from the research project of Boer (2005) about knowledge sharing in organizations have formed the basis of the literary research. Many books from the HG library (HanzeMediatheek) collection have been consulted and also published research projects from the knowledge bank (‘HBO Kennisbank’). The last method of literary research has been reviewing research projects from previous graduation students of KCNR have been consulted at the knowledge bank as well as printed copies that are available at KCNR.

The main goal of the literary research has been to define what knowledge sharing at events means in the particular case of bNR. By looking at different definitions and explanations a theory could be found from Nonaka and Takeuchi (1995) to check whether knowledge sharing is really knowledge sharing by referring back to a same model or figure.

The two first sub-research questions will be answered in the literary research.

2.3.2 Desk Research

In order to analyze the data of the organization of bNR desk research has been executed. Information about bNR has been gathered to understand how the organization is set up. This information has been retrieved from the website of KCNR as well as the vision document of bNR. Next to that, the current knowledge sharing event methods have been analyzed in accordance with the theory of Nonaka and Takeuchi (1995). This method of research has been chosen because understanding the organization and the applied methods is one of the most important aspects of this research.

2.3.3 Qualitative Research

Qualitative research is a method of research that has been chosen because in-depth information based upon experience is needed rather than statistical information about knowledge sharing. Qualitative research has been carried out by means of short open interviews. Adjusting to circumstances during qualitative interviews is possible because the retrieved data and information are of most importance. Quantitative research cannot adjust to circumstances because the exact same questions need to be asked to all respondents in order to keep track on the quantities of the questions answered. The approach has been open and flexible in a way that a few questions were prepared up front. During the interview could be anticipated on the answers and if necessary go deeper into backgrounds of the collected data.

Orientational interviews, short interviews and observations are required in order to determine if involved people of bNR actually share knowledge and why, instead of that they only say they share or should share knowledge.
2.3.4 SWOT analysis
In order to get a clear idea of the organizational situation a SWOT analysis has been created from the results of the literary-, desk and qualitative research.

2.4 Method of Implementation
An implementation part is incorporated in this research because some of the outcomes the research results will be put into action on the short and long term after this research has been finalized. The TMQIO method of Grit (2011) has been a guideline for the already implemented event and for the future events that will be implemented.

Key Issue
In this chapter the methods of research have been clarified and the methods that are appropriate for the specific way of research are chosen. In the next chapter the results of the preliminary research will be described. Preliminary research is needed in order to get acquainted with the topic and to formulate the research outline.
3. Results of Preliminary research

Knowledge sharing is a complicated topic and could be looked upon from many different angles. In order to find out more about the organization of bNR and what knowledge sharing means for this organization research is needed. Before the main research path is chosen, preliminary research is needed to get acquainted with the organization and the topic; bureau NoorderRuimte (bNR) & knowledge sharing.

3.1.1 Orientational literary research

Orientational literary research was needed to get familiar with the topic and the organization. The website description, the Vision document by Hekman, E. & de Boer, S. & Post, M. (2012) and other bNR documents show that sharing knowledge is a central aspect of bNR, more does it bring to the table in the first part of the main research; desk research (see chapter 4.2). The activities, mission and vision of bNR state that knowledge sharing takes a central role whereby research, the work field and the learning process overlap. Learning will occur on three levels by as well the student, the lector, the researcher as well as the work field. The organization of bNR wants to have an open and professional culture that communicates, is interactive and stimulates knowledge creation and sharing.

Early on it was discovered that many is written about knowledge, knowledge sharing, events and the reasoning behind it. Everyone has a different view upon these topics, therefore a thorough research was needed on what kind of knowledge sharing methods and perspectives are applicable to bNR. During this research a theory/model is used to refer back to the different knowledge sharing methods and this theory will be described in detail in the literary research (see chapter 4.1).

3.1.2 Orientational interviews

In order to get a better perspective on how bNR and KCNR operates several involved people have been interviewed in the first couple of weeks of the graduation semester. All interviewees were unanimous that knowledge sharing is a central aspect in the vision of bNR. However they did not share the same ideas on how knowledge sharing should take place at bNR.

The initial information about the organization of bNR and knowledge sharing was given by Ms. Post who is Coordinator of 'Bureau NoorderRuimte'. She explained that knowledge sharing is a central aspect of the organization while students from multiple study disciplines come together. However time should learn how it will take place in practice since bNR is a new organization freshly started in February 2013. Research projects on the organizational culture, positioning, motivation and knowledge sharing by means of events will therefore be executed. In order to find out how knowledge sharing can take place in the most optimal way at bNR.

Mr. Mobach – Lector Facility Management gave his personal view on KCNR, bNR and knowledge sharing. He expressed that KCNR is currently in a transit stadium with the start of bNR where the multidisciplines are central in this new situation. Students, lectures, PhD students and researchers take part in the 'new way of working'. In his opinion this is a big improvement for KCNR compared to how it was before. People are able to meet and discuss now. Students experience communication mainly on micro level which means discussions/meetings between student and lecturers. The question is how KCNR and bNR can develop further. The next level in Mr. Mobach’s opinion is
integration: in the now situation working together and discovering how to work together in the best way, so that in the future it will be self-evident. In the future it should be obvious that with multiple study disciplines better outcomes will be assured to solve different cases. This also applies to the researchers of KCNR. The main development of KCNR is the connection made between students and the work field by means of research cases. The complete outcomes of the interview can be found in Appendix I.

Ms. Froentjes – is responsible for the communication at KCNR. She gave insight in the communication methods which are currently used. Next to that, she expressed what her personal vision on development is in the area of communication and knowledge sharing. Communication is the initial aspect of knowledge sharing and therefore it is very important to know which methods are practiced and for what reason. Several ways of communication are already used such as website communication with many chapters showing the agenda, news, projects and information about the involved people of KCNR. Knowledge cafés are organized where relevant topics of KCNR are presented and discussed by internal and external people in the form of interactive workshops. Next to that, lunch&learn meetings are organized monthly where researchers present their projects. These lunch&learn meetings are interesting for experts to know what fellow researchers are doing. Once a year all the research project results will be presented by means of a mini-symposium. In the form of a market the different research project are presented. The symposium is organized to create awareness on the topic and for the possible continuation of research projects. Network meetings also take place to give out information and share experience with direct questions from the field, these meetings bind all people of KCNR and interaction is the central aspect.

One of the aspects which Ms. Froentjes highlighted was that not everything can be just shared instantly, the emphasis lies on whether it is new and interesting for people. The complete outcomes of the interview can be found in Appendix I.

Ms. van Wingerden – is Project-leader of the knowledge network with a focus on the shrinkage (“Krimp”) of villages in Northern Netherlands. She gave insight into the topics they deal with and who is involved. The ‘Krimp café’ is one of the large knowledge sharing events at KCNR. A visit to the ‘Krimp café XL’ showed how people from governmental, educational and other institutes are brought together to share knowledge on the topic. This type of event gives people the opportunity to take part in the process sharing knowledge.

3.1.3 Conclusion of the orientational research & interviews

From the orientational interviews a few things came forward which gave direction to this research. Many knowledge sharing events have been organized already at KCNR. However bNR is a new part of the organization therefore it is not known how these events will work out in the future because the organization is still in a transit stadium as Mr. Mobach stated. Not all the knowledge sharing methods and events which are currently organized at KCNR are applicable to bNR. Therefore it is a good thing that research projects have been handed out to students in order to discover what kind of knowledge sharing methods could be applied at bNR.

Before bNR started in February 2013 much effort has been put into creating a vision on what the role of knowledge sharing should be at bNR. This can be seen in the organizational description and Vision document. However this has been without applied practical experience and therefore this first period has been a sort of trial on how everything takes place in practice.
The set up of the organization gives the opportunity for people to meet and share knowledge but whether this really happens is the big question.

### 3.2 Objective & Research questions

This research concentrates on knowledge sharing at bNR. The vision, methods and opinions of people at bNR are analyzed to discover which methods of knowledge sharing work effectively or need attention and what aspects should be developed more. By setting a clear objective and by use of research questions the topic will be tackled.

#### 3.2.1 Objective

Knowledge sharing is a crucial process within all kinds of organizational settings. In many ways knowledge can be shared but the focus of this research will be on how bNR can share knowledge by means of physical events. Since the organization of bNR is newly set up and just started off in February 2013 it should be researched how knowledge sharing can be structured, optimized and which factors and methods are of importance. Therefore existing methods should be analyzed and new methods should be created in order to be able to practice this physical aspect of knowledge sharing.

This research report gives bNR guidance for realizing the physical development of the knowledge sharing community further. It will give insight into the physical aspects that contribute positively and negatively to knowledge sharing in a learn/work environment. This research will not only be relevant to bNR but also to KCNR and other research organizations, because the research results can be used for a follow-up research.

During this research on knowledge sharing at bNR the following objective has been the red thread: *Giving recommendations to bureau NoorderRuimte (bNR) for the purpose of knowledge sharing events in advancement of the knowledge sharing community of bNR, by giving insight in the aspects of the needs and wants of the students of bNR and the theory of knowledge sharing.*

Next to the research of knowledge sharing at bNR a project plan has been created for an International Conference on Energetic Restoration on 19 September 2013. Knowledge sharing will be a main aspect of this day; this research delivers good examples on which knowledge sharing methods could be used at the conference.

#### 3.2.2 Research questions

The pre-literary research, the orientational interviews and the above objective has been a base for the formulation of the following research question.

*Main research question: How can physical events contribute to knowledge sharing within bNR?*

This main research question has been divided into three sub-questions with each pointing out the information that is needed to answer them. These questions formed the base of this research project.

1. What is knowledge sharing?
   - Definition & examples
With the help of literary research the meaning of knowledge sharing has been defined. It has been analyzed which particular meaning is applicable to knowledge sharing at bNR. These definitions will be compared to the desk research such as the Vision document of bNR. The choice to answer this research question by means of literary research has been due to the fact that the exact meaning of knowledge sharing should be defined, before any further research can be executed. Finding definitions, models and theories are best executed with literary research.

2. What are (knowledge sharing) events?
   - Definition & examples
   - Knowledge sharing events
   - Methods
   - Knowledge sharing events applicable for bNR

Literary research defined events and knowledge sharing events. In addition, this paper looked into which knowledge sharing events could be applicable to bNR. Literary research appeared to be the best method to find definitions and explanations about knowledge sharing events.

3. How can knowledge sharing be optimal represented in events at bNR?
   - How are events that share knowledge currently used at bNR?
   - Which event methods could be applied best at bNR?
   - Do the event forms at bNR meet the theory on knowledge sharing?
   - Theories?

A combination of literature, desk- and qualitative research has been used to answer this research question. The answer captured the current situation of knowledge sharing between students, lectors and clients at bNR by means of the opinion and experience of the involved people at bNR (students, coaches and management). A comparison has been made between the ‘optimal’ situation according to the literature and the current knowledge sharing situation of bNR. The answer on this research can be found in the conclusion of this report in chapter six.

3.3 Relevance of research
The topic of knowledge sharing is very relevant to the organization of bNR, an environment where people from multiple disciplines work together. What is to be expected is that these people will share knowledge merely by working together. But the methods on how knowledge sharing takes place need to be optimized by the organization of bNR. They have to keep improving methods, while knowledge sharing is so essential in their vision. In order to do this properly research is needed. Knowledge sharing is a key aspect in finalizing all current research projects and essential to the new research projects of the coming semester. Therefore it is important that knowledge sharing is researched thoroughly and that the current methods and possibilities are analyzed.
This advisory report delivers an analysis on the current work forms and recommendations how the face-to-face knowledge sharing could and should take place at bNR. In order to facilitate the existence of the organization in the future the advices will be clearly formulated in the chapter with the conclusions and recommendations.

3.4 Demarcation

In this research the theory on knowledge sharing and events is analyzed in the light of the situation at bNR.

To tackle the topic knowledge sharing at bNR optimally the overall project has been divided into different research projects all with a different angle on knowledge sharing. In figure 2 you can find the research division of the topic “knowledge sharing” which is divided into 6 sub-topics.

This research is one of the six and is focusing particularly on knowledge sharing in the physical form of events meaning that people are physically together while sharing knowledge.

Figure 2: Research projects division on knowledge sharing within bNR (Noordhoek, 2013)

In order to define knowledge sharing at bNR, research has been performed on multiple levels; macro, meso and micro. First there is looked at previous research which concentrates on knowledge sharing at the HG which is on macro level. Secondly the methods used at KCNR have been analyzed and from
that research could be concluded what knowledge sharing event methods are applied at bNR. Conclusions and recommendations have been formulated after the research on all these levels was executed.

In figure 3 you can see the different levels of knowledge sharing that are kept in mind. This research will be concentrated on knowledge sharing within bNR, which is on micro level.

**Figure 3: Levels of knowledge sharing (Noordhoek, 2013)**

The knowledge that is shared at bNR happens between different layers of involved parties. bNR not only consist out of students but also coaches, clients, lecturers and other researchers who can also be part of KCNR, HG, from the network of KCNR and/or the work field. Different methods of knowledge sharing apply to these layers. In figure 4 here below these layers are visualized.

**Figure 4: Layers of the parties involved with knowledge sharing of bNR (Noordhoek, 2013)**

**Key issue**

*This chapter described the results of the preliminary research. This research has been executed in order to get acquainted with the topic and to formulate the research outline. In the next chapter the results of the main research are explained, it consists out of literary-, desk- and qualitative research.*
4. Results & Conclusions of Main Research

This chapter will be the main research part of this thesis and reports all the research findings. The research has been divided into multiple approaches; literary research, desk research and qualitative research. These will form the main paragraphs of this chapter and they all have a separate conclusion. The research questions are answered in this chapter and the following key terms will be dealt with: knowledge, knowledge sharing, events, knowledge sharing events, motivation and learning.

4.1 Literary Research

In this paragraph an answer will be given on the first research question with the help of examples from the literature.

4.1.1 Theory on knowledge sharing

Research question 1: What is knowledge sharing?

As Mr. Mobach stated in the orientational interview; knowledge sharing is a complicated topic with many different ways to look at it. The transfer of knowledge is a topic wherefrom many literature is available and which is too big to capture within ones eyesight. Therefore in this research the focus will be on knowledge sharing in organizations; within bNR by means of physical events. The definitions on knowledge and knowledge sharing will be explained in this paragraph. The focus will be on the collective and motivational perspective of knowledge sharing. In addition, the emphasis is on the community of practice.

Definitions on knowledge and knowledge sharing

The definitions on knowledge sharing differ enormously, mainly because of the different perspectives, different people and theories employ such as motivational, relationship, economical and the collective perspective. Every perspective covers a different aspect of knowledge sharing.

In table A several definitions on knowledge can be found that came across while conducting the research, in the pile of books from the library of the Hanzehogeschool (HG).

<table>
<thead>
<tr>
<th>Table A: Knowledge definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>According to Drucker (1993), knowledge is not just one of the resources within an organization, but is in fact the only asset that matters.</td>
</tr>
<tr>
<td>Knowledge – the insights, understandings, and practical know-how that we all possess – is the fundamental resource that allows us to function intelligently (Wiig, 1996).</td>
</tr>
<tr>
<td>First, knowledge, unlike information, is about beliefs and commitment. Knowledge is a function of a particular stance, perspective, or intention. Second, knowledge, unlike information, is about action. It is always knowledge “to some end”. And third, knowledge, like information, is about meaning. It is context specific and relational. “Justified belief” (Nonaka &amp; Takeuchi, 1995)</td>
</tr>
</tbody>
</table>
"We consider knowledge as a dynamic human process of justifying personal belief toward the “truth”" (Nonaka & Takeuchi, 1995)

Information is a flow of messages, while knowledge is created by that very flow of information, anchored in the beliefs and commitment of its holder. This understanding emphasizes that knowledge is essentially related to human action. (Dixon, 2000)

Berger and Luckmann (1966) argue that people interacting in certain historical and social context share information from which they construct social knowledge as a reality, which in turn influences their judgment, behavior, and attitude.

In the book of Davenport and Prusak (1998) on ‘Working Knowledge’ the following definition on knowledge sharing is used.

“Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the mind of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms.” (Davenport & Prusak, 1998)

These writers are guru’s in the knowledge world and they mainly focus on the economical perspective of knowledge sharing. The economic perspective gives insight in that people will not share knowledge if it does not give them an economic reward and/or economic harm. The focus lies primarily on what people might gain or lose economically by sharing knowledge. The economic rationality is one consideration but is not helpful in explaining why people (do not) share knowledge.

The publication of Boer (2005) mainly focuses on the collective and motivational perspective. This is incorporated because at bNR the same perspectives are used. In the opinion of Boer knowledge is considered to be a collective understanding as well as the ability to transform this understanding into actions (skills). In the case of bNR this knowledge is transformed in executing research projects on the retrieved knowledge which is carried out by students and researchers.

Knowledge sharing according to Boer, refers to a social-relational process through which individuals try to establish a shared understanding about reality and to establish the (potential) ability to transform this understanding into (collaborative) actions to yield performance. They do this by using diverse combinations of signs (e.g. language, gestures, illustrations) and tools (e.g. physical objects, communication technologies, mental models). At bNR this is done by means of the knowledge sharing events such as the lunch&learn meetings and see chapter 4.2.2 for the other methods.

The motivational aspect is the predominant aspect in the behavior of the engaged people at bNR. Everyone is responsible for his or her research and therefore the focus is mainly on their own work and research. For the individual the collective outcome is not merely as important as the personal development this in contradiction to the organization who values collective outcome more.

Based on the research of Boer (2005) people’s motivation is most important to understand whether knowledge sharing is happening or not. People can be convinced about the necessity of knowledge sharing, also know with whom they should share this information, they are cognitively able, share a
similar language and have the right technologies available and still knowledge will not be shared because the underlying motivation is not there.

Gaining knowledge is the primary focus of all stakeholders in higher educational institutions because it is fundamental to the learning process of students. Maximizing the ability to gain knowledge implies that continued efforts should be kept to progressively enhance the learning process. (Saadé, Nebebe, & Mak, 2009)

An employee can be either extrinsically motivated, i.e. to obtain goals that are apart from the work itself, or intrinsically motivated, i.e. to gain personal satisfaction from doing the job (Amabile, 1997). Researchers like Osterloh and Frey (2000) and Mudambi et al. (2004) indicate the importance of intrinsic motivation mechanisms to support knowledge creation and sharing in an organization. (Gammelgaard, 2007)

Table B shows a funny example of applied knowledge from available information, know-how and motivation. This is a good example because it gives a clear insight on the issues that are also encountered at the organization of bNR.

<table>
<thead>
<tr>
<th>Table B: Metaphor of a cake</th>
</tr>
</thead>
</table>
| A useful definition of knowledge by Gurteen (1999) is that it is about know-how and know-why. A metaphor is that of a cake. An analysis of its molecular constituents is data – for most purposes not very useful – you may not even be able to tell it were a cake. A list of ingredients is information – more useful – an experienced cook could probably make the cake – the data has been given context. The recipe though would be knowledge – written knowledge - explicit knowledge – it tells you how-to make the cake. An inexperienced cook however, even with the recipe might not make a good cake. A person, though, with relevant knowledge, experience, and skill – knowledge in their heads - not easily written down - tacit knowledge – would almost certainly make an excellent cake from the recipe.

It is important to note that to make knowledge productive you need information. Knowing how to make a cake is not sufficient – you need the list of ingredients. And to decide what cake to make - you need information – the tastes of the consumers of the cake.

Know-why is also important. If an ingredient of the cake was unavailable – knowing the purpose of that ingredient might help a knowledgeable cook substitute an alternative. In fact know-why is often more important than know-how as it allows you to be creative - to fall back on principles – to re-invent your know-how. (Gurteen, 1999)

Knowledge sharing in organizations is the focus of this research and the findings of Boer (2005) stated that it is generally agreed upon that knowledge sharing is a crucial process within organizational settings, whether these are project teams, formal work groups or communities of practice. Organizational settings usually exist to achieve a collective outcome, for example delivering physical or intellectual products and/or services. To create these collective outcomes, knowledge needs to be shared among the members of the organizational settings. At bNR these organizational settings are in the form of Community of Interest (COI) groups where students and coaches come
Collective outcomes can be explicit like for project teams or formal work groups (e.g. producing a product or service) or implicit like informal networks and communities of interest (e.g. developing members’ capabilities) (see chapter 4.1.2 and appendix III for the explanation; explicit & implicit (tacit)). The diversity of collective outcomes results in a diversity of different organizational settings, within which knowledge is being shared differently. Also professional experience with network-groups learns that extra effort is needed in the form of promoters or facilitators. This in order to motivate people to look beyond their personal struggles and see the opportunities that knowledge sharing gives. People sometimes cannot imagine that others may have had the same problems and might have solved them in an easy to adapt way. (Boer, 2005)

In the example here below from Boer (2005) is described what the difficulties of knowledge sharing in organizations are. There is no blue-print for the ideal situation on how knowledge sharing would be successful in every organization. Every organizational structure holds opportunities, for instance peer-to-peer and/or team-based collaboration can be possible.

As bNR is also a community of practice this example is applicable and emphasizes the difficulties that will occur in these organizational settings. Even-though a good structure and organization for knowledge sharing is in place, this does not automatically mean that it will happen.

The need for knowledge sharing seems to be problem driven in almost all the cases. Only when people feel pressure when a problem comes up they feel the need to share and retrieve knowledge from each other. Next to that, the aspect of whether it is economically beneficial, or is providing honor, self-fulfillment and pride is a driver for wanting to seek for knowledge sharing,

An insight in this could then be that independently from the organizational structure people need a motivator or drive to remove the hurdle and to be open for knowledge sharing in any form.
Boer (2005) stated the following in his work on knowledge sharing in organizations:

The last two decennia, some organizations have reorganized themselves into team-based organizations, since there was widespread agreement that multi-disciplinary working was essential in the new competitive environment (Orlikowski, et al., 1995). While moving from a functionally based company, where experts were located amongst others with similar backgrounds and interests, to one based on project teams, it was observed that much crossfertilization of ideas within and across disciplines were lost (Blackler, et al., 1999). Increasing number of organizations have tried to solve this problem by creating communities as a way of maintaining connections with peers, continuing the abilities of specialists to work at the forefront of their own fields (Wenger, 1998). Appealing historic examples (Orr, 1990; Wenger and Snyder, 2000) probably have contributed to the desire of many organizations to implement similar communities within or between organizational settings. Although communities benefit from cultivation (Wenger and Snyder, 2000), their fundamentally informal and self-organizing nature makes a simple managerial implementation somewhat difficult (management paradox). Indeed, in practice many organizations are struggling with the implementation and facilitation of communities and the expected advantages for knowledge sharing do not always come off.

As stated earlier, there are many perspectives on how knowledge sharing can take place in the following table C the different ways of how knowledge sharing can take place whether it is formal and/or informal.

<table>
<thead>
<tr>
<th>Table C: Different ways of sharing information</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Copying an interesting article or report for a colleague</td>
</tr>
<tr>
<td>- Distributing one’s own publication among interested colleagues</td>
</tr>
<tr>
<td>- Drawing people’s attention to interesting congresses or tuitions</td>
</tr>
<tr>
<td>- Organizing colloquia and workshops</td>
</tr>
<tr>
<td>- Discussing possibilities for projects and emergent opportunities with colleagues</td>
</tr>
<tr>
<td>- Organizing book reviews for colleagues</td>
</tr>
<tr>
<td>- Functioning as a mentor or coach for juniors or young seniors</td>
</tr>
<tr>
<td>- Mutually coaching of seniors</td>
</tr>
<tr>
<td>- Organizing broadly announced meetings for project evaluation</td>
</tr>
<tr>
<td>- Organizing intervision meetings within a sector</td>
</tr>
<tr>
<td>- Discussing bottlenecks of projects with a colleague</td>
</tr>
<tr>
<td>- Joining acquisition</td>
</tr>
<tr>
<td>- Deliberately setting up projects with</td>
</tr>
<tr>
<td>- Asking if someone knows something about a particular subject by E-mail</td>
</tr>
<tr>
<td>- Scanning the desk and bookcase in order to find interesting subjects to talk about</td>
</tr>
<tr>
<td>- Asking the secretary to find out who is working on a particular subject</td>
</tr>
<tr>
<td>- Communicating the content of a report to someone, so that he passes this on</td>
</tr>
<tr>
<td>- Using the library search engines</td>
</tr>
<tr>
<td>- Putting project descriptions on the central server</td>
</tr>
<tr>
<td>- Talking informally with colleagues in the corridor, during lunch</td>
</tr>
<tr>
<td>- Working in someone else’s office to yield interesting knowledge</td>
</tr>
<tr>
<td>- Making your private library public for colleagues</td>
</tr>
<tr>
<td>- Traveling together (train, bus, carpooling)</td>
</tr>
<tr>
<td>- Organizing and participating acquaintance meeting for new people</td>
</tr>
</tbody>
</table>
other sectors
- Consulting a colleague
- Attending a sector meeting by someone from another sector
- Dropping something which is not true and see what happens
- Finding information on a shared printer

(Based on Weggeman 1997; p.181)

4.1.2 Theories & Models on knowledge sharing
In this sub-chapter two theories on knowledge sharing can be found. These two theories were considered for usage in the analysis of the knowledge sharing methods.

Most critics and scholars identify the knowledge processes to be chains in some kind of knowledge value chain, that either is, or should be followed iteratively and repetitively; Knowledge being created becomes increasingly valuable for an organization when it is combined with other knowledge, when it is shared among its members, when it is also used by these organization members and finally when it is maintained and stored for future use. (Boer, 2005)

Figure 5: Knowledge process value chain

This theory makes it very clear that knowledge sharing needs to be an ongoing process where multiple persons are involved. However this theory will not be used in the further analysis.

The following theory of Nonaka and Takeuchi is the method of choice for this research. This model is easy to apply to the case of bNR and is very clear in the situation of knowledge sharing.

Theory of Nonaka and Takeuchi
This theory is developed to explain the phenomenon of organizational knowledge creation. The core of the theory lies in the four modes of knowledge conversion that are created when tacit and explicit knowledge interact with each other. These four modes – which are referred to as socialization, externalization, combination, and internalization – are what the individual experiences. These modes are clearly described in Appendix III.
Nonaka and Takeuchi argued that individuals initially create knowledge and that the knowledge created by individuals becomes organizational knowledge through a process described by the theory.

“The Nonaka and Takeuchi KM model focuses on knowledge spirals that explains the transformation of tacit knowledge into explicit knowledge and then back again as the basis for individual, group, and organizational innovation and learning.” (K. Dalkir)

The authors recognize two types of knowledge—tacit and explicit. Explicit knowledge is the knowledge that can be written down and relatively easily transferred from one person to the next, contained in for example manuals and procedures. Tacit knowledge on the other hand is more difficult to articulate because it often arises out of experience, and communicated only indirectly, through metaphor and analogy.

Table D: Two types of knowledge – Tacit & Explicit (Nonaka & Takeuchi, 1995)

<table>
<thead>
<tr>
<th>Tacit knowledge (subjective)</th>
<th>Explicit knowledge (objective)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of experience (body)</td>
<td>Knowledge of rationality (mind)</td>
</tr>
<tr>
<td>Simultaneous knowledge (here and now)</td>
<td>Sequential knowledge (there and then)</td>
</tr>
<tr>
<td>Analog knowledge (practice)</td>
<td>Digital knowledge (theory)</td>
</tr>
<tr>
<td>Hard to make tangible</td>
<td>Coded knowledge</td>
</tr>
<tr>
<td>Personal</td>
<td>Having a grip, bring into words</td>
</tr>
<tr>
<td>Hard to formulate</td>
<td>Transferrable, written or spoken</td>
</tr>
<tr>
<td>Grey knowledge</td>
<td>White knowledge</td>
</tr>
</tbody>
</table>

Organizational knowledge creation is the capability of a company as a whole to create new knowledge, disseminate it throughout the organization, and embody it in products, services, and systems.

New knowledge and information is created, from the inside out, in order to redefine both problems and solutions and, in the process, to re-create their environment.

This theory can be linked to the knowledge sharing process at bNR. Students, researchers and co-workers of bNR are working in the direction of applied research where knowledge sharing and transfer is a matter of daily practice. It is of importance that involved people make their knowledge explicit and share information, in order for the metaphorical wheel not to be invented again.

4.1.3 Conclusions on the literature of knowledge sharing

From the data found by means of literary research the following conclusions are defined according to the organization of bNR.

At bNR the organizational settings are in the form of a Community of Interest (COI), these are the groups where students and coaches come together. Next to that there is a Community of Practice
(COP), this is the setting is used where knowledge/information is shared through social media and/or events. The latter two concepts refer to the theoretical background of Boer (2005) on the link between organizational settings and knowledge sharing. The results of this knowledge sharing have personal and collective outcomes. Both are difficult to measure and are also differently valued by the stakeholders, being the students/researchers and the organization, in this case bNR. The collective outcomes are more valued by the organization of bNR because it is their core business. However, the students of bNR are focussed on their personal goals and development so there is a latent conflict of interest or a discrepancy between the personal goals of students and the organization of bNR. Group evaluations on knowledge sharing on both the common and the personal learning aspects could bring these interests closer.

Intrinsic motivation of the involved people is an important aspect. If people do not feel motivated and do not see the value and what is in it for them, no effort will be put into sharing knowledge. Finding out what stimulates the intrinsic motivation of people needs to be researched further to be able to get answers on this matter.

4.1.4 Theory on Events
Knowledge sharing can be done through multiple ways. The focus of this research lies on knowledge sharing in the form of events and therefore it is necessary that the definition ‘event’ is clarified.

Research question 2: What are (knowledge sharing) events?

The below table E focuses on events in general, it is important to know the definition on this to understand the difference between events in general and knowledge sharing events. Not every event is suitable to share knowledge and therefore it should be analyzed what differentiates them and what they have in common.

<table>
<thead>
<tr>
<th>Table E: Definitions on events</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Event: an occurrence at a given place and time; a special set of circumstances; a noteworthy occurrence” (Getz, 2007)</td>
</tr>
</tbody>
</table>

Events, by definition, have a beginning and an end. They are temporal phenomena, and with planned events the event programme or schedule is generally planned in detail and well publicized in advance. Planned events are also usually confined to particular places, although the space involved might be a specific facility, a very large open space, or many locations.

The term ‘event’ is also used in many ways, commonly by adding adjectives like ‘sales’ or ‘sport’, which reflects their form or function. ‘Form’ derives from the combination of various ‘programmic elements of style’ that make event types different. Form is a primary concern of event planners and designers, or at least their usual starting point. The basic and generally accepted forms of meetings, sport events, fairs and festivals can be taught in each culture, although there are going to be differences in their style and meanings.

Events in business: An event is an activity of a particular nature where a group of invited guests is present. (Herlé)
An event is a special occurrence tied to a certain time and place, consciously planned by an initiator (individual, group, or organization) and aimed at a certain target group, to achieve a certain goal through consciously selected means.

In table F several face-to-face knowledge sharing events are noted which could be applicable and useful to bNR. These methods are exclusively for organizations and have as a purpose to brainstorm, and are teambuilding and solution orientated. The following methods will be described and when they should be used will be explained in appendix V:

<table>
<thead>
<tr>
<th>Table F: Knowledge sharing events</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Face-to-face meetings</td>
</tr>
<tr>
<td>o Open space</td>
</tr>
<tr>
<td>o World café</td>
</tr>
<tr>
<td>o Knowledge fair</td>
</tr>
<tr>
<td>o Chat or talk shows</td>
</tr>
<tr>
<td>o Yellow pages</td>
</tr>
<tr>
<td>o Speed geeking</td>
</tr>
<tr>
<td>o Samoan circle</td>
</tr>
<tr>
<td>o Line-up</td>
</tr>
<tr>
<td>o Icebreakers</td>
</tr>
<tr>
<td>o Group facilitation</td>
</tr>
<tr>
<td>o Graphic facilitation</td>
</tr>
<tr>
<td>o Dotmocracy</td>
</tr>
<tr>
<td>o Fishbowl</td>
</tr>
<tr>
<td>o DeBonos six thinking hats</td>
</tr>
<tr>
<td>o Peer assists</td>
</tr>
<tr>
<td>o After action review</td>
</tr>
<tr>
<td>o Retrospect</td>
</tr>
</tbody>
</table>

In table G here below clear examples are given what the difference is between events where knowledge transfer takes place and where knowledge sharing takes place. The difference is significant and therefore very important to bring this under the attention. At bNR the many events are organized with the goal to share knowledge however in some case it is more like a transfer of information rather than sharing knowledge.

<table>
<thead>
<tr>
<th>Table G: Events for knowledge sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information and knowledge transfer</strong></td>
</tr>
<tr>
<td>Objective: Informing of the participant about certain matters, transfer of knowledge.</td>
</tr>
<tr>
<td>Realization: The organizer possesses certain knowledge or information, which he wants to transfer to the target group. The participant will be invited to a location where the organizer can transfer this knowledge. That can be own knowledge or that of specialists (lecturers, speakers, instructors). Initially it is about one-way communication. Of course feedback and interaction are welcome.</td>
</tr>
<tr>
<td>Possible events: share holders meeting, course of training, seminar, press conference, presentation of a new product.</td>
</tr>
<tr>
<td>Also events like a congress or symposium derive the transfer of knowledge and information, however these belong more in the next category.</td>
</tr>
<tr>
<td>(Waardenburg, 2011, p. 11&amp;12)</td>
</tr>
<tr>
<td><strong>Sharing</strong></td>
</tr>
<tr>
<td>Objective: in contrast with the previous objective it is not about one-way</td>
</tr>
</tbody>
</table>
knowledge transfer of knowledge here, but to share it with the members of the target group.

Realization: it is about two-way communication and the participants of the event have an important share in the program. The subject of the event will be discussed, participants separate in workgroups etc.

Possible events: fair, congress, symposium, meeting, workshop (Waardenburg, 2011, p. 12)

Knowledge Sharing events are designed for colleagues to share and learn from each other across teams and institutional boundaries.

a. Record the discussions and post videos and presentation materials to a staff collaboration Website.
b. Publicize the event with emails and posters. Have an agenda and topics so that the discussion is focused.
c. Send invitations so people commit to coming to the event.
d. Limit the number of meetings, in order for it not to become an annoyance, but regularly enough to keep the momentum going forward.

Poll your staff to see what topics they are interested to discuss in knowledge sharing events. (Knowledge sharing events, 2012)

“Conversation is a meeting of minds with different memories and habits. When minds meet, they don’t just exchange facts: get transform them, reshape them, draw different implications from them, and engage in new trains of thought. Conversations doesn’t just reshuffle the cards: it creates new cards” - Theodore Zeldin

4.1.5 Conclusions on events

The data and methods of the organization of events are highlighted in chapter 4.1.4. Several conclusions which apply to events of bNR are formulated here.

Regular organized events are not the same as knowledge events. There is also a difference between events for knowledge transfer and events for knowledge sharing. It depends on the objective of the event. With a knowledge transfer type the emphasis is on giving information (one-way communication). And with knowledge sharing events the set-up will be around vise-versa communication (two-way communication). The difference lies in the fact that the aim of knowledge transfer is to inform people and it is left to the receiver to use this knowledge or not. With knowledge sharing the aim is to activate all parties involved to use the obtained knowledge and experience and transform this into new knowledge and actions.

Every kind of event has its own methods and outcomes. Before an event is organized bNR explicitly think of the objective of this happening. When is referred back to the model of Nonaka and Takeuchi
(1995) (see chapter 4.1.2) the organizer should realize upfront which type of knowledge (tacit or explicit) has to be shared. The chosen format of the event should be customized to the specific event expectation. See appendix V for examples of knowledge sharing events and when to apply them.

The expected advantages for knowledge sharing are not always transpired due to poorly chosen methods and not taken into consideration which knowledge should be shared. When the chosen method is wrong although the knowledge sharing event is prepared and executed perfectly the expected outcome will not be established.

Key issue

This literary research defines theory on knowledge sharing and on knowledge sharing events. The focus has been on the theories of Boer (2005) and Nonaka & Takeuchi (1995). Several new knowledge sharing event methods have been highlighted which could be applicable to bNR. In the next chapter the vision and the organization of bNR will be described. Next to that, the current knowledge sharing events methods will be analyzed.
4.2 Desk Research

In this chapter the most important results of the desk research are incorporated together with the analysis on the available materials at bNR. The website and Vision document of bNR have been the main source for this part of the research. Next to that the current methods of the knowledge sharing events are analyzed.

4.2.1 bureau NoorderRuimte (bNR)

Bureau NoorderRuimte (bNR) is part of Kenniscentrum NoorderRuimte (KCNR). In this paragraph the vision, activities and essence of bNR will be described. The data is retrieved from their website and the vision document of bureau NoorderRuimte. (Kenniscentrum NoorderRuimte)

Function of bNR

A recent development in the organization is the start of bureau NoorderRuimte (bNR). bNR is part of NoorderRuimte on area development (Kenniscentrum NoorderRuimte - KCNR). A learning-workplace where students, lecturers, researchers and lectors work together on practical cases that are initialized by KCNR or by the external environment of KCNR. Professionals from the work field (the external partners) participate also in bNR. Students can hand in their application to apply for a (graduation) placement to execute a research for bNR/KCNR. At bNR students from a multitude of disciplines work together in an interdisciplinary environment.

The four schools Institute of Facility Management (SIFM), Institute of Engineering (SIEN), Academy of Architecture, Building Engineering and Civil Technique (SABC) and the Institute of Business Administration (IBK) of the Hanzehogeschool (HG) Groningen participate at NoorderRuimte. These schools make sure that some of their students, lectors and researchers are involved at bNR. For personal and professional development senior workers of bNR will guide the student.

In the programs of bNR the professional development of the student and the research results are central. The Board of Directors granted bNR with “excellent graduation placement” because of their whole placement programme. (bureau NoorderRuimte, 2013)

Figure 7 visualizes the function of bNR. The figure connects all the involved parties and how they influence each other.

Figure 7: bureau NoorderRuimte – Kenniscentrum – study courses (bureau NoorderRuimte, 2013)
The essence of bNR

The essence of bNR is described in figure 8. It shows the learn- and work community with a horizontal line, the horizontal line represents the learn-work process of students (including guidance) and the vertical line represents the questions on practical research (research-cases from out KCNR and assignments from the work field).

![Diagram of bNR](image)

Figure 8: KCNR – bNR - student (bureau NoorderRuimte, 2013)

Reference points within bNR:

1. The place where students, lectors and external individuals work together on applied research based on real-life issues and jointly learn.
2. Multidisciplinary
   a. As a resource to obtain good products
   b. As a goal to prepare students for the work field
3. An education form where the individual development of students is central
4. Researching and headstrong and fits in the excellence program of the HG
5. The place where people from KCNR + external people work as initiator, as researcher, as quality-warder, as expert, or as case assigner.
6. The possibility for businesses, governments and other institutes to get involved with the education of young professionals and with applied research based on real-life issues in KCNR
7. Input for KCNR, the researchers and lectors; they are co-responsible to ‘scale-up of- and reflect on’ the research results from out bNR.
8. The elevator for students to Master-educations by bringing notice in the program to an ‘academic attitude’.
9. The possibility for motivated MBO-students – with HBO ambitions – to participate in applied research based on real-life issues on HBO-level.
10. A physical and attracting place to learn, research, meet and...

(bureau NoorderRuimte, 2013)
Vision on knowledge development

The organization of bNR has a vision on knowledge development. In figure 9 the combination of involved people and aspects is explained. It shows that all involved parties connect with each other in a way that supports knowledge development.

![Figure 9: An overview on the combination of the work field, research and learning (Hekman, Boer, & Post, 2012)](image)

At bNR a new platform will be created where research, the work field and the learning process will meet each other. Through creating all sorts of new combination between these three learning landscapes, a new form of knowledge creation develops. By preference the principle of three-way-learning will be applied whereby existing knowledge and insights will be combined to new knowledge having in mind the direction of development. It fulfills and adds up to who and what we want to be as ‘Kenniscentrum NoorderRuimte’, bNR but also as HG. The research assignments at bNR will connect to the research agenda of the knowledge centre, central HG-themes such as “Energy” and “Healthy aging” will re-occur as well as societal themes. Learning will be possible on four levels the student, the lector, the researcher and the work field.

Professional knowledge development at bNR

bNR wants to be an organization with an open and professional culture, that communicates, interactively and stimulates knowledge creation and sharing. The institute functions as a Community of Learners (COL) and vice versa as a learning community. The personal development of employees, linked to the delivered products (advices) is central in this organization. Next to that bNR wants to contribute to the knowledge development of the clients. (Hekman, Boer, & Post, 2012)
This means that within bNR it is important that participants facilitate in the knowledge development of all other involved parties. The behavioral aspects that are involved here are as follows:

- Proactive in giving and asking of feedback on substantive field
- Contributes to knowledge development of the team and community of bNR
- Contributes to knowledge development around the research programmes of ‘Kenniscentrum NoorderRuimte’.
- Responds to new developments with regard to knowledge and application of it to the surrounding.

4.2.2 Knowledge sharing event methods at bNR
This chapter will analyze the knowledge sharing methods that currently take place at bNR. These methods will be coupled to the model of Nonaka and Takeuchi to check whether it can be considered as real ‘knowledge sharing’ or if it might be a mere transfer of knowledge. The model of Nonaka and Takeuchi can be found in the literary research in chapter 4.1.2 or in Appendix III, where the supporting information on the theory can be found.

The following methods will be analyzed below: try-out assignment, lectures, COI groups, ‘Friday-afternoon receptions and the lunch&learn meetings.

4.2.2.1 Try-out assignment
At the start of the placement period, February 2013, bNR organized an orientation week. The very first batch of students chose their research topics and they were divided into groups to execute a try-out assignment together, this assignment had to be completed in two days. Two try-out assignments were given by two outside clients of the ‘Gemeente Groningen’ and a committee of a small village up north. The assignments were given to the six multi-disciplinary teams that were formed. Three teams were put on each assignment; they had to come up with creative proposals for the clients. The proposals were presented when the clients came to visit bNR, which was in the week after the orientation week (week 8, 2013). Questions could be asked after the short presentations and there was time for a small discussion on the topics. Afterwards the proposals were handed over to the two clients. Since there were more groups than topics the two topics were tackled by multiple groups. The clients received therefore multiple proposals for their cases, this gave them the chance to look at the case from different perspectives.

According to the theory and model of Nonaka and Takeuchi this way of knowledge sharing was very effective (see chapter 4.1.2 and appendix III for more explanation). Knowledge sharing at the try-out completed the circle of knowledge sharing (see figure). It started off with the presentation of the two issues, every group was assigned to one of the topics and started to work on their proposal lectors and students from different study disciplines had to work together. This means that tacit knowledge went to tacit knowledge (see chapter 4.1.2 and appendix III for more explanation) in this case in the Socialization mode. The students worked on the proposal together, brainstorming about possibilities and dividing tasks. Tacit knowledge went to explicit knowledge in this stage. When the proposals were finalized, they were presented to the two clients and afterwards the discussion was opened. The modes Externalization and Combination (see chapter 4.1.2 and appendix III for more explanation) came into place in these steps. Finally the clients went back home with multiple proposals on how their issues could be solved. This gave them the possibility to think outside of the
box, which is very helpful in a situation where no immediate solution to the issues could be found and this is part of the Externalization mode.

Feedback of the students on the try-out assignment was that the motivation to really invest in the assignment and share knowledge in the interest of the client cases was not optimal because in these days also the research assignments had to be chosen. The focus of the students was more on choosing a matching research topic then bringing the assignment to a good end.

4.2.2.2 Lectures

In the first couple of weeks of the February 2013 placement period, several lectures on how to do research and on how to explore the research assignment were given by Mr. Mobach (– Lector Facility Management & part of KCNR), Mr. de Boer (– Lector Human Technology & part of KCNR) and Mr. Stijnenbosch (– Lector Real Estate Management & part of KCNR). They presented several methods and strategies on how to execute a good and valid research using a PowerPoint presentation. The outline of these lectures has been as follows; someone stood in front of the class presenting at the hand of a PowerPoint presentation. Students and/or coaches sat down in the classroom listening and could ask questions during or after the presentation. Whether this was allowed depended on the particular lecturer’s preferences.

This type of knowledge sharing is more like a transfer of knowledge rather than really sharing and creating new knowledge. One person tells something to a group of people, but the process stops there. It depends on what the people who receive the knowledge, to do something with it, this stands in the open and is not immediately put forward into new knowledge or are of immediate usage of the given knowledge. Only the Socialization mode of Nonaka and Takeuchi takes place here in most cases, which means that only the transfer goes from the knowledge sender to the receiver. This mode is more clearly explained in Appendix III.

4.2.2.3 Community of Interest (COI) groups

The February 2013 batch of students of bNR has been divided into Community of Interest (COI) groups. The COI group consist out of six students from multiple study disciplines and one of the five coaches of bNR. These groups are formed to act as guidance for students and to support multidisciplinary collaboration between students. They meet up to discuss the progress and problems they are facing with their research project. Knowledge sharing is an important aspect, especially in the first stages of the research because no clear direction is given. In the first stage of the research projects a brainstorm on the topics is the main aspect of the meetings. Later on, when the students have been working on their research for a few weeks discussion moments about the issues they face take place. In these meetings advises can be given to each other and new insights from another’s point of view can be shared. Next to this, exchange of information, knowledge and experience takes place in these meetings.

These intervention moments are organized differently in each COI group and this highly depends on the demands of the particular coach. One group has a meeting every week and the other three times in the whole semester, so efforts could be made to give some guidelines on this.

This type of knowledge sharing is working in accordance to the theoretical model of Nonaka and Takeuchi. The knowledge of students will be applied to the situation immediately by means of the
input given by the students. In these settings students from multiple study disciplines sit together and give each other feedback and advice. One student presents his or her research results and/or problems. The presenting student will share its knowledge on the specific case. The given knowledge can be transformed into new knowledge by the student who receives the feedback, but is also useful for the other participants, who can use the new experience in other applications.

4.2.2.4 ‘Friday-afternoon’ reception

A few times in the February 2013 placement period a reception is organized in an informal setting at bNR in A1.03 of Zernikeplein 11, van Dooreveste. These gatherings have taken place on Thursday afternoons from around 4 o’clock to 5.30pm. Catering and drinks for the reception were arranged by a few students of bNR. The invitees are people from bNR and KCNR (students, coaches, lectors, researchers and clients), they come together to have an informal drink. In this setting people can have an informal conversations and share knowledge in a relaxed environment. Research projects can be discussed and advises can be given on for instance who to contact for which information, or document can be exchanged and new connections can be established. These conversations and project discussions can be done between two people or in a small group while having a drink and a bite.

The amount of people that turn up at the reception determines to which extend knowledge can be shared. At the first time the reception was organized almost only bNR students showed up who are also always present at bNR during the week. People from KCNR did not take the time to come to the meeting; apart from a few exceptions. Therefore the scope of knowledge sharing was limited.

An informal gathering like this could be perfect to know from other co-workers where they are working on, what their expertise is and who they may know and who could be of help for your research topic. Next to that these gatherings can give opportunities to step out the individualistic way of working. Moreover this gives the possibility to share some personal information and ideas on work-related topics simultaneously. These informal meetings present students with a great opportunity to make contact with fellow researchers, co-workers, lectors, students and coaches.

When we look back at the model of Nonaka and Takeuchi this type of gatherings can definitely make the knowledge sharing circle round. Of course this highly depends on the types of conversations and what the individual does with the given and shared knowledge.

4.2.2.5 Lunch&learn meetings

Lunch gatherings are also organized by KCNR, here researchers have the opportunity to present their projects. In this setting people from NoorderRuimte can learn from each other in a more informal setting while having lunch. Research results can be discussed, feedback can be given and questions can be asked and answered (Q&A). Students from bNR are also allowed to organize these meetings, this has occurred three times during the placement period of February 2013. These lunch&learn meetings had the form of a brainstorm/workshop and a World café which is a brainstorm method (see appendix V for explanation). The topics of these meetings were Urban Farming, Organization Culture and the Nature of the Provence of Drenthe. These meetings were used to get ideas and knowledge from other students and coaches of bNR. Several brainstorm methods were used to
provoke out-of-the-box thinking. The outcomes of these brainstorm/workshops were evaluated by the students who hosted the meeting to have new input for their research or that of their client.

This method of knowledge sharing is very effective and can be referred back to the model of Nonaka and Takeuchi. At the start of a lunch&learn meeting the subject matter will be explained to all participants mostly by means of a presentation. This part of knowledge transfer is the Socialization mode. This is mostly about their research topic, progress and/or results or in assignment of an external client. A discussion will be hosted and different ideas will come to the table and the Externalization and Combination mode take place. When the results come back to the hosts and they incorporate this in their research the last mode Internalization mode is done and the knowledge becomes tacit again.

4.2.3 Target groups of bNR

Knowledge sharing can take place on multiple levels and between multiple groups of people. In order to have a good mix or combination of participants target groups are created. These groups are needed in order to organize the most appropriate knowledge sharing event. Not every event is most suitable to every target group since every group has specific interests.

![Figure 10: Division of target group bNR (Noordhoek, 2013)](image)

- Students of bNR: students who do their third year- or graduation placement at bNR where they execute a research in collaboration with a coach, a client and possibly other students.
- Coaches of bNR: at bNR there are five coaches who guide the students through their placement semester and in some cases there is also a client who drafts a research proposal.
- Clients: these are research project assigners from the work field such as municipality, governmental institutes, provinces, PhD students and project leaders.
- KCNR: these are the people from KCNR that are also involved with the research projects of the bNR students. This could be people from the management and/or other researchers.

4.2.5 Conclusion of desk research

The data which is available of bNR, the knowledge sharing methods used, and the target groups are analyzed in this chapter. The conclusions on these topics have been formulated here below.

The bNR description states in the reference points the following:

- Multidisciplinary
As a resource to obtain good products
- As a goal to prepare students for the work field
- An education form where the individual development of students is central

From most of the reference points the vision of bNR is clearly stated. The above mentioned points seem to be still in development but have all possibilities to grow and mature to the expected level. It is logical that bNR still needs some more development and growing time while they only started in February 2013.

Table H sums up the conclusions on the current knowledge sharing event methods of bNR.

<table>
<thead>
<tr>
<th>Table H: Conclusions of the current knowledge sharing event methods of bNR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Try-out assignment</strong></td>
</tr>
<tr>
<td>In the try-out assignment the expectation of bNR was to have students create a project plan for external clients. This has not been as effective as expected; this could be concluded from the feedback of students. During the try-out assignment the students were also occupied with choosing their research project topics. Therefore involvement was not entirely concentrated on the try-out assignment. This is very unfortunate for the clients who also invest time and energy in giving out this assignment and in visiting the presentation day. A conclusion can be drawn on this that it should be a phasing of the elements. The activities should be scheduled separately which can avoid difficulties, resulting in better quality of both items.</td>
</tr>
<tr>
<td><strong>Lectures</strong></td>
</tr>
<tr>
<td>Lectures are a good way to inform people however the way it is done will influences the direct outcomes. One option is to do it in an interactive way (question can be asked in-between), the possibility to share knowledge will be increased in this way. Another option is that the lecturer presents and questions can be only asked afterward. This immediately sets the tone of because when it is not allowed to ask questions in between the knowledge sharing process is limited and not as many relevant questions can be asked.</td>
</tr>
<tr>
<td><strong>COI groups</strong></td>
</tr>
<tr>
<td>The COI groups of the February 2013 placement semester are all organized differently. Every coach uses his or her own method how the students are guided and which methods are used to steer them in the good direction. This causes differentiation between students and their personal development. The intervision is seen as very effective by the coaches and students of bNR because the discussion is applied on the specific cases which come to the table. And can be applied by the students to their personal research project if desired.</td>
</tr>
<tr>
<td><strong>Reception</strong></td>
</tr>
<tr>
<td>The ‘Friday afternoon’ receptions are poorly attended; only students and almost no bNR staff have been showing up. This makes the meetings not very effective. The focus should be on how to attract more people to these gatherings and making them more effective by creating the right atmosphere for knowledge sharing.</td>
</tr>
<tr>
<td><strong>Lunch&amp;learn</strong></td>
</tr>
<tr>
<td>This method of the lunch&amp;learn meeting works well because people who attend do not have to put extra time into it because it is during lunch time. These meetings are organized monthly so this gives structure and people know what to expect.</td>
</tr>
<tr>
<td><strong>Target groups</strong></td>
</tr>
<tr>
<td>Not every event is most suitable to every target group since the interests differ</td>
</tr>
</tbody>
</table>
from each other. For example a lunch and learn meeting will preferably be organized with all target groups to assure multi disciplinary interaction and learning.

**Key issue**

*By means of desk research the vision and the organization of bNR have been described in this chapter. Next to that, the current knowledge sharing events methods and target groups have been analyzed. The following chapter will focus on qualitative research by means of short open interviews. These outcomes will be analyzed and conclusions will be formed.*
4.3 Qualitative Research

In this chapter the qualitative research will be described. At first the outcomes of the short open interviews will be analyzed followed by the conclusions on these outcomes.

4.3.1 Short open interview outcomes

To support the research on knowledge sharing people who are involved with bNR were interviewed with a questions form in order to collect opinions, experiences and visions on knowledge sharing at bNR. The group of interviewees consisted out of students and coaches of bNR. By making use of the Facebook page of bureau NoorderRuimte, email, printed questionnaires and direct interviews the answers on these questions were obtained. Since bNR mainly consists out of students and coaches their opinions and vision on the situation are considered as most important. These people are the first who experienced the knowledge sharing methods used in practice since the first semester of bNR started in February 2013.

From the 35 short open questionnaires that were sent out 20 responded.

The opinions and visions were asked upon the following topics:

1. Knowledge sharing at bNR currently
2. Physical knowledge sharing event forms
3. Future of knowledge sharing at bNR

In Appendix D the summary of the short interview outcomes and the total outcomes of the orientational talks and the short interviews can be found to support the analysis which will be given in this sub-chapter about the interview outcomes.

The main outcomes of the first topic – knowledge sharing at bNR currently – can be characterized by:
- Lack of structure, or structure not being clear
- Individualistic approach, student tend to operate solo
- Lack of initiative
- Poor attendance at events through tentative approach

The outcome on the second topic – physical knowledge sharing event forms – in short:
- Lunch&learn/ brainstorm meetings are mentioned several times
- Presentations on progress and other moments where feedback is incorporated

The third and last topic – future of knowledge sharing at bNR – was envisioned as follows:
- Obligatory knowledge sharing events
- Better insight in who is researching what, and is knowledgeable on what. Making networks more effective (knowledge bank/domains/centre)
- Fewer events organized but better prepared with greater impact. (theme weeks, ‘share’ days, excursions)

4.3.2 Conclusion of qualitative research

In this paragraph conclusions will be formed on the analysis of the interview outcomes. It will be translated into what it exactly means for bNR.

Knowledge sharing at bNR currently:
1. The organization of bNR seems to be in a pioneer phase at the moment – ‘still building while the shop is already open’. This brings uncertainty and creates an ad-hoc way of working. The structure of the organization is not solid yet.

2. The behavioural aspects of the students; they tend to operate solo, act individualistic and are hesitant to take initiative. The mindset of students needs to be better understood by bNR. The programme should be more adapted to the different expectations and purpose of the organization and the student. A solution needs to be found on how the students can be triggered to get involved more.

Physical knowledge sharing events forms, the following methods were stated as preferred:
Lunch&learn meetings, knowledge-quiz, half-term presentations, validation meetings with students and clients, workshops, brainstorm sessions, group discussions and regular feedback moments.

It seems that in one way the people like the knowledge sharing events organized currently. However on the other hand it seems they see many other opportunities how knowledge sharing events could take place at bNR and what would be effective in the organization.

Future of knowledge sharing at bNR:

1. The knowledge sharing events need to be obligatory because the students are incapable of seeing the value of these events initially. The importance of the events organized need to be more transparent to students to understand what is in it for them.

2. Interaction should come in the field of all sorts of subjects whereby the initiative lies with all involved parties – students and lectors. More structure is needed on how knowledge sharing events are planned and advertised, it has to be less ad hoc and better communicated in advance.

Key issue
This chapter focused on qualitative research by means of short open interviews. These outcomes have been analyzed and conclusions are drawn from that. There is much room for improvement especially on structure of the organization and the motivational aspects of the students. In the next chapter the outcomes of the literary-, desk- and qualitative research are valued in a SWOT analysis. With this analysis the decision can be made which points can be maintained as they are and which points need attention, should be changed and/or where there is room for improvement and development.
4.4 SWOT analysis

In order to bring the three research methods (desk-, literary- and qualitative research) together a SWOT analysis has been created which translates the data on knowledge sharing to the specific case of bNR. The opportunities of the possible developments of bNR are brought to light and the strengths that can be utilized even more. Also points that are in need of extra attention and effort are highlighted.

Table I: SWOT analysis on knowledge sharing at bNR

<table>
<thead>
<tr>
<th>Internal analysis</th>
<th>External analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td><strong>Opportunities</strong></td>
</tr>
<tr>
<td>S1 Multi-disciplinary students together in one working environment stimulates sharing of knowledge and experience.</td>
<td>O1 Creation of regular “knowledge” events to create more structure and a platform for knowledge sharing.</td>
</tr>
<tr>
<td>S2 Informal environment encourages sharing of best practices and team-building.</td>
<td>O2 Make event obligatory to involve students more in ‘knowledge sharing’.</td>
</tr>
<tr>
<td>S3 Motivational to take part-win/win.</td>
<td>O3 Teach students how to build networks and think beyond their individual goals.</td>
</tr>
<tr>
<td>S4 Knowledgeable and ambitious programme of bNR gives plenty opportunities.</td>
<td>O4 Bring more variety in the knowledge sharing events at bNR</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td><strong>Threats</strong></td>
</tr>
<tr>
<td>W1 Low attendance because the value of the events are not obvious to everyone.</td>
<td>T1 Effort put into learning events does not have the desired effect because students do not see what is in it for them resulting in low attendance and poor participation.</td>
</tr>
<tr>
<td>W2 Too busy with arranging the organization and process orientated.</td>
<td>T2 Re-invention of the wheel because people tend not to share knowledge as a result of their individualistic behavior.</td>
</tr>
<tr>
<td>W3 Not enough motivation of people to participate because of the individualistic culture amongst students.</td>
<td>T3 The organization method might not be attractive for future students because of the lack of structure.</td>
</tr>
</tbody>
</table>

The SWOT analysis in table I highlights the knowledge sharing aspects of bNR categorized on their value. From the results of this analysis, we can see which points can be maintained, while they are working properly and which points need some attention, and finally which points should be changed and/or where there is room for improvement and development.

**Key issue**

The outcomes of the literary-, desk- and qualitative research are valued in the SWOT analysis in this chapter. With this analysis the decision can be made which points can be maintained as they are and which points need attention, should be changed and/or where there is room for improvement and development. The focus of the next chapter will be to conclude this research project by formulating the recommendations and methods for implementation.

Anke Noordhoek
5. Conclusion, Recommendation & Implementation

The final conclusion on this research of knowledge sharing will be formulated in this chapter. In the discussion the research will be evaluated and moreover the recommendations will be given to bNR. Finally a description on the implementation will be given and a personal reflection is included.

5.1 Conclusion

Bureau NoorderRuimte (bNR) is a newly founded organization with the vision to apply knowledge sharing based on the theory into practice. The organization of bNR just started with the first batch of students in February 2013.

The objective of this bachelor thesis on knowledge sharing is to find out how knowledge sharing can be structured and optimized at bNR. The objective is based on the main research question; ‘How can physical events contribute to knowledge sharing within bNR?’.

- On the short term this should give insight how knowledge sharing events should take place at bNR. The mini-symposium on the 20th of June 2013 and the International Conference on the 19th of September 2013 are important step stones to practice and gain experience. New subjects for further studies can be formulated as a result of these events.
- On the long term it should create a good base to share knowledge by means of events in an effective and responsible way.

Physical events may contribute successfully to knowledge sharing at bNR because an event gives a special leverage to subject and the impact off it.

The format of the knowledge sharing event must accurately fit to the sort of knowledge (tacit- or explicit) that has to be shared. Careful preparation is important in order to protect the knowledge sharing process. This typically belongs to the field of Facility Management because when the physical aspects of the event hamper the purpose, the knowledge sharing itself can be jeopardized.

In table J the conclusions of the main research results of the literary-, desk- and qualitative research are defined.

### Table J: Main research conclusions

<table>
<thead>
<tr>
<th>Literary research</th>
<th>Knowledge sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From this research can be concluded that the collective perspective is suitable to bNR. However the students take in the motivational perspective and these different perspectives result in a conflict of interest. Nonaka and Takeuchi (1995) have formulated a theory/model about knowledge sharing which can be applied to measure knowledge sharing methods in organizations very effectively.</td>
</tr>
<tr>
<td>Events</td>
<td>Knowledge sharing event methods need to fit to the type of knowledge (tacit- or explicit) to be shared. The physical requirements that play a significant role are strongly</td>
</tr>
</tbody>
</table>

Anke Noordhoek
connected to the aspects of Facility Management

**Desk research**
- The organization of bNR is partly still in development which could be concluded from the reference points that are applied already. This is because bNR is a newly founded organization in February 2013.
- The current knowledge sharing event methods used need to be more in balance and structured. The main concerns are how to get people involved and motivated and have them see what is in it for them.
- If the methods would be adjusted to the specific target group the effectiveness could be increased.

**Qualitative research**
A few conclusions could be drawn from the short open interview outcomes; bNR is still in a pioneer phase and therefore the way of working is ad-hoc and there is no specific structure in place. Interactive knowledge sharing events are preferred and most of the respondents would like to see the events more transparent and obligatory in the future.

**SWOT analysis**
The SWOT analysis shows that many aspects of the organization are still in the developing phase and things still need to be discovered how it works in practice. The motivation of students needs to be identified more into depth. The organization can meet these needs and in the meantime improve the overall effectiveness and quality.

The theory on the collective perspective on knowledge overlaps with the vision of bNR. The outcome of the short open interviews in the qualitative research learns that this is not shared by the students. This is because of the position of the students in the learning process. They feel the pressure that their personal research projects and other obligations have to be met as well. Students have a hard time with seeing the bigger picture, therefore transparency is important.

### 5.2 Discussion
The research based interpretation of the results will be reflected in this chapter and the used methods are evaluated. Table K the interpretation on discussion on the conclusion is stated focused on the literary-, desk- and qualitative research separately.

<table>
<thead>
<tr>
<th>Table K: Interpretation and discussion on conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Literary research</strong></td>
</tr>
<tr>
<td>There is a tremendous amount of data available about knowledge sharing in organizations. However this literary research was needed to define several aspects of this topic to be able to understand what could be applied to bNR. Therefore is has been difficult to select the appropriate theory according to the situation of bNR. Finally I have found that the publications of Boer (2005) and Nonaka &amp; Takeuchi (1995) are most suitable in this particular case. The model of Nonaka has been easy to apply to the different knowledge sharing methods and to measure the effectiveness of them.</td>
</tr>
</tbody>
</table>

| **Desk research** |
| In my opinion the organization description and vision of bNR are very |
ambitious and not all reference points are met yet. However there is considerable potential to meet these in a later development stage when things are more structured. Currently the motivation of students is not entirely understood and this causes friction in the organization of knowledge sharing events, resulting in poor participation. When the focus would be on the target groups the result would be more effective, informal methods could work for instance better if you only deal with students.

**Qualitative research** In order to analyze the knowledge sharing methods of bNR the opinions and experiences of the involved people from bNR were needed. I chose to ask a few open questions to the involved people of bNR in a more informal manner to provoke input. However the outcomes retrieved from that have not always been as expected. Sometimes the answers of Question two and three were similar. Though this did not affect the results in my opinion.

Although Quantitative research was an option, it wasn’t included because of the small-scale of the research.

Students had a quit negative mindset towards everything that they thought would be an extra effort, primarily because they were not aligned with the process of bNR and could not see what was in it for them. Therefore more transparency and interpretation on this is needed.

The small population of the involved people at bNR was a limitation. Moreover the fact that bNR just started in February 2013 as a newly found placement organization caused problems, while there was no material or experience to compare to. Therefore the benchmark could only be the opinions and experience of the people involved at this time. Initially this research was expected to figure as the step stone for the International Conference which will take place in September. However due to underestimated time schedules and other factors this will unfortunately not be the case.

**5.2.1 Follow-up research**

The results of this research, problems and ideas can form the basis for new research projects.

Intrinsic motivation is one of the main aspects that should be researched further in order to find out what the exact influence is of motivation on knowledge sharing. Lisette Hidding & Saskia Sonneveld carried out a research on motivation of the students at bNR. Their research on motivation and this research on knowledge sharing methods should be combined.

Another interesting follow-up research could be how ICT can play a bigger role in knowledge sharing at bNR. Hereby we could think of online agenda’s or keeping up who does what in the organization, develop a shared data storage system, such as a knowledge bank, and create social media pages like Facebook.

It is advised to create research projects for students in the future where knowledge sharing is an absolute necessity. When students apply for a graduation place they need to know what to expect
and where the learning possibilities are at bNR. Also research project could be given to a student to research how knowledge sharing can become a necessity in research projects. The student could give advice on the outline of future research projects and afterwards these could play a role in developing new research projects.

5.3 Recommendations

In assignment of bureau NoorderRuimte (bNR), ‘knowledge sharing’ at the organization was examined. This bachelor thesis analyzed the role of events when it comes to sharing knowledge. Several knowledge sharing events were already organized at bNR, however we could conclude that not all methods are as effective as they could be. Next to that, there are many growth opportunities for bNR.

Based on the research results of this project the following recommendations for the future development of bNR are given.

- In order to stimulate the continuation of research projects at bNR it is recommended that an event is organized at the end of the graduation semester where people can present their research findings. From these findings new research projects could be formulated or continuation on the subject can be advised.

- bNR could also look at other methods for knowledge sharing at events that are available.. bNR should consider exploring these because this can create new opportunities in the field of knowledge sharing. In appendix V several face-to-face knowledge sharing events are described and expressed in which situation these are applicable.

- Implement obligatory knowledge sharing events to increase the overall involvement and to improve the quality of work. This can be done in multiple ways; one method is by having all students host a lunch& learn meeting once or twice during the placement period. Another method is a Pitch (short powerful presentation) whereby every student needs to present research topic and progress, after the pitch feedback can be given and questions can be asked back and forth. It should be clear for students what to expect and what is expected of them.

In table L recommendations will be given on how to improve the current knowledge sharing event methods.

<table>
<thead>
<tr>
<th>Table L: Recommendations for knowledge sharing events at bNR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Try-out assignment</td>
</tr>
<tr>
<td>Lectures</td>
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</tbody>
</table>
interaction. Next to that, the listeners should get an assignment or discussion topic where they can apply the knowledge that has been taught in the lecture. Later on the outcomes can be discussed and in this way the knowledge sharing circle is round again. It takes more effort from both the presenter as the audience because it is easier not to ask questions and as a presenter it is difficult to keep the line in the story and also finish in time. But when both do, the learning effect will be much bigger than in the other case.

**COI groups**

The COI groups in the placement semester of February 2013 are all organized differently. This causes differentiation between the different groups of students and with their development. Therefore this should be organized differently in the future so the common knowledge sharing process is equal amongst all students and coaches of bNR. The COI groups should for instance meet every first Tuesday of the month at one pm or once every week. The most important aspect is that is the same for every COI group and that the coaches synchronize this with each other.

**‘Friday afternoon’ receptions**

Promote and stimulate ‘Friday-afternoon’ receptions. Try to make it a “you cannot miss this” element for instance with a short introduction by a staff member to create the right atmosphere.

**Lunch&learn meetings**

Continue organizing lunch&learn meetings but make sure they are good prepared and people know what is in it for them. By making use of a better prepared format the knowledge sharing process would be more attractive.

### 5.4 Implementation

In order to put the findings into action several events have been organized and some are still in the pipeline. The following five monitoring aspects are essential during the preparation and execution of the project:

![Figure 11: Monitoring aspects TMQIO of a project (Grit, 2011)](image)

- **Time** (time schedule throughout the preparation and execution of the project)
Time is a very important element in the organization of an event. It depends greatly on how big or complex the event is and how much time is available for the organization, planning and the resources necessary for it.

2. **Money** (available budget and money spend at every stage)
Size and choice of setting, the public that is addressed, duration, national or international are key factors for the costs. It is very important before making any obligations of financial decisions to be sure the budget is available and approved by the responsible person(s). It must be clear which items are included in the budget so there are no misunderstandings. Any change in the programme of requirements of the location or facilities must be looked at on their implications on costs and the event schedule.

3. **Quality** (outcomes of interim products and final results of desired quality)
Quality is about expectations and hopes to be fulfilled. There is also an implicit expectation on the organizational (often FM) aspect; Is the location as expected, does all the audiovisual equipment work, how is the paperwork, are the foods and drinks ok? All the aspects are important for the total experience of the event and also for the effectiveness of the learning.

4. **Information** (right information is essential, clear tasks and information about project’s progress)

5. **Organization** (project manager responsible – internal and external collaboration, decision making, delegating responsibility and organizing meetings)

These aspects are elaborated for the already implemented event and the events that are suggested to be implemented.

**5.4.1 World-café on nature visions of Xplorelab of the Provincie Drenthe 16-05-2013**
On the 16th of May 2013 a world café has been organized by a project team of students of bNR. This event figureted as a prototype in order to test this knowledge sharing event method; world café. In assignment Xplorelab of the Provincie Drenthe an event had to be organized at KCNR where a brainstorm and discussion could take place about visions on nature in the Provincie of Drenthe. Looking at the different forms how brainstorming and discussions can take place there was chosen for the ‘World Café‘ method. (see appendix V for the full explanation)

The complete process of the organization and execution of this event is explained in appendix VII in the form of a blue-print. The feedback received from the client Provincie Drenthe has been very positive. They were happily surprised about the applied practical outcomes. Also the people of bNR who took part in the event gave positive feedback and they found it very creative and effective method in a pleasant informal manner.

<table>
<thead>
<tr>
<th>Table M: TMQIO World-café</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>In 3,5 weeks’ time the world-café has been organized. In 1,5 week a plan of approach was set up by the project team of bNR and approved by the client</td>
</tr>
</tbody>
</table>
Xporelab. The invitation was send out 1,5 week before the event date. The event itself took around 2,5 hours but in the morning the catering, space planning and extra print jobs were arranged. Other aspects of the time planning of the event can be found in appendix VII which shows the plan of approach and the eventual outcomes.

Money
In consultation with Mr. Akse of Xporelab the budget has been arranged for this event. In the plan of approach the costs of the event were estimated and approved by Mr. Akse (see appendix VII). Among the cost were the following things; catering and printing costs. No labour costs were involved in this case because this assignment has been part of the graduation programme and the students are not awarded with money.

Quality
This event was initialized in order to get as many ‘out of the box’ ideas as possible. No specific quality standards were expected by the client because of that. The ideas generated were managed by people that were involved in the brainstorm process. They guided the brainstorm session and summarized the collected ideas from each round afterwards. A summary report has been delivered to the client. (see appendix VII)

Information
In the first meeting with the people from Xporelab the ideas on the event have been discussed. Insight has been given on the brainstorm topics and the work of Provincie Drenthe. During the event itself very interesting insights of the participants were discussed. The clients were positively surprised that the outcomes were thought of in such a way that could really work in practice.

Organization
Xporelab is part of the Provincie Drenthe and the assignment was given to students to organize an event to generate ideas about the nature of Drenthe. These kinds of events have been organized for multiple target groups and in this case for students and employees of KCNR.

5.4.2 Mini-symposium on Knowledge Sharing 20-06-2013
On the 20th of June 2013 a mini-symposium will be organized in order to finalize the placement period of bNR as I have stated also in my recommendations. Coaches, graduation assessors, other placement students of bNR, friends and family are invited to be present at this day.

This will give students the chance to present their research outcomes where they have been working on the past 5 months by means of presentations and a poster. Two presentation rounds will be organized within each round 2 presentations where students present the following topics:
- Energy + Village
- Bureau NoorderRuimte - Knowledge sharing
- Energetic Restoration
- Shrinkage + living area

This research belongs to the group of bureau NoorderRuimte – knowledge sharing. The students from the researches of knowledge sharing (see figure 2) will form a group to cover the topic
knowledge sharing together. In a 45 minute presentation the 6 research topics will be represented. The organization of bNR consists out of four main aspects which are people, assignments, area/space and guidance. The aspects will be explained based on the input given by the students from out the six research projects. The results findings will be represented and by means of discussion statements at the end a brainstorm should take place in order to formulate new research project topics.

New research project as an outcome of the mini-symposium is the most admirable situation. Students of the new bNR semester, September 2013, will be able to start working on their researches with the generated research project topics. Therefore, it is important that knowledge is shared on this mini-symposium day in the most optimal way to pay it forward.

‘Innovation is not a one-act drama, one innovation leads to another, bringing about continuous improvement and upgrading.’ (Gammelgaard, 2007)

In table N here below a blueprint is created on how the presentation round on bNR and knowledge sharing should take place.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time period – 45min</th>
<th>Responsible</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>10 min</td>
<td>Mirjam</td>
<td>The organization of bNR and the research projects on knowledge sharing will be introduced.</td>
</tr>
<tr>
<td>Presentations</td>
<td>20 min</td>
<td>Koen, Robin, Nick, Lisette, Fabian, Saskia &amp; Anke</td>
<td>Present the bNR aspects based on the input given by the students from out the six research projects.</td>
</tr>
<tr>
<td>Discussion</td>
<td>15 min</td>
<td>Visitors, students of bNR and coaches present</td>
<td>Involve the audience in creating new starting points for follow research</td>
</tr>
<tr>
<td>Coffee break/ reception</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Post**er market**
Table O: TMQIO Mini-symposium

| Time          | The preparation of the conference started in May 2013. Each presentation group is responsible to realize their presentation. Around one week before the day of the mini-symposium the deadline of handing all thesis projects has been planned. By means of a few meetings direction will be given to how the day of the mini-symposium will be planned. The mini-symposium will take around 2,5 hours (15.00 – 17.30) in total wherefrom the presentations will take around 1,5 hour. After the presentations an informal reception takes place with a poster market. In order to finalize the generated ideas for new research projects need to be reviewed and the new topics need to be formulated. (see table M for time planning of the presentation) |
| Money        | The event is organized from out KCNR which is part of the educational institute of the Hanze University. No costs will therefore be involved in hiring location because this is organized internally. The catering costs that will be involved during the mini-symposium will be for the account of KCNR. In the second part of the programme poster presentation of the research projects |
| Quality       | The reason why this event is organized in this way is because research has been done by multiple students about knowledge sharing. All research projects are finalized by the time the symposium takes place. In order to be able to present the results proudly this event is organized with the involvement of colleagues, assessors, family and friends this event is organized. If the presentations are well structured and organized new research project topics should be formulated and can be delivered to bNR. |
| Information   | In preparation meetings is brainstormed how the event should take place and what things should be organized in order to succeed. Clear information about what to expect of the event is described on the invitation (see appendix VIII). What the role of the visitors is during the event will be explained during the event itself. Every presentation had a different approach on how they want to present their research results. |
| Organization  | The event is organized from out KCNR and bNR. The catering of the Hanze University; Eurest, will be used during the event. The students of bNR will be take in the biggest role during the event. They are responsible of representing their projects. |

5.4.3 International Conference of Energetic Restoration – Lower energy in historical buildings 19-09-2013

On the 19th of September, 2013, an International Conference will be organized from out the organization of Energetic Restoration which is also part of Kenniscentrum NoorderRuimte (KCNR).

A big research project on the topic ‘Lower energy in historical buildings’ has been carried out. The project started in November 2011 and will be finalized in the summer of 2013. The International
Conference will be organized to present the research results of this project and to share knowledge about topics that are in the field of Energetic Restoration.

Knowledge sharing will be made possible by multiple aspects that will be organized in the conference. International speakers will be invited to give a lecture about their field of expertise which is also in the field of Energetic Restoration. A network-lunch will be organized in order for people to meet each other and give the opportunity to create new working relations. Next to that, presentation rounds will be organized where people can take part in if they register. Discussions during and after these lectures, lunch and presentations are possible.

A separate project plan has been created for the organization and planning of this event. The programme can be found in appendix IX.

<table>
<thead>
<tr>
<th>Table P: TMQIO International Conference</th>
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</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
</tr>
<tr>
<td><strong>Money</strong></td>
</tr>
<tr>
<td><strong>Quality</strong></td>
</tr>
<tr>
<td><strong>Information</strong></td>
</tr>
</tbody>
</table>
Organization
The project-leader of the project of Energetic Resoration is Bate Boschma. The project team is responsible for the content of the conference and consists out of Maarten Vieveen, Tineke van der Schoor and Ramon Alberts. Next to that, Saskia Wiepkema and Anke Noordhoek give support in the organization of the conference on mainly the facility management aspects (practical).

Key issue
The focus of this chapter has been the finalization of this research. Conclusions, recommendations and implementation advises have been given. The following chapter will reflect back on how the process of research has been and which competences have been developed while executing this research.
6. Critical reflection

Did I use the right theory?
I have been using literary research to define the topic and to find theories on how knowledge sharing could be measured. It has not been easy to find the right theory because so much literature has been written about knowledge sharing. The organization of bNR is only of small-scale so not much theory was available that applied exactly to that. However I sincerely believe that I found the most applicable theories with the publications of Boer (2005) and Nonaka & Takeuchi (1995).

Was the number of respondents high enough?
Around 35 involved people of bNR were asked to answer a few open questions for my qualitative research and 20 people responded by means of a direct interview, email, Facebook and/or informal conversations. Because bNR is only a small organization consisting out around 30 students, 5 coaches and a few management people I find the number of respondents high enough. Very clear points came out of the results and this information could be of good use in the development of bNR.

Did I use the right methods?
Literary research was used to define the keywords of the research and to theory to measure knowledge sharing methods. In the first couple of weeks I interviewed involved people of bNR and asked many questions to people of KCNR and bNR. The desk research has been used to analyze the information given by the organization. And later on in the graduation process I decided to use qualitative research to get to know in-depth information on the opinions and experiences of the people of bNR. These methods of research used has been the most applicable methods in my opinion.

What are the weak parts of my work?
In my opinion the week parts of this thesis is the part were qualitative research is executed. The method used was very straightforward but maybe the quality wasn’t as strong. The formulation of the question was sufficient but not optimal. I have been able to receive the outcomes which I needed but this was not in particular because of my interview set-up but because I was persistent in asking questions.

What could have gone better?
My personal planning could have gone better because I have put myself in the position that I was depended on what others delivered to me which is not very smart to do when you are in the middle of your graduation process.

What could I have done differently?
I should have taken the lead myself much earlier in the process instead of waiting for others to direct me. I would have been able to do this myself as well.

What were your assumptions?
I assumed that the whole process would have gone faster. However this has not been the case, and things progressed so slowly which was very much beyond my expectations.
What does all this mean for the value of my work?
The combination of the research project and the project plan has been challenging. The planning of my time and work did not go always as smooth as I hoped. Next to that, because I did not have the complete control on things mainly while organizing the International Conference work got behind. This caused stressed out situations especially during the end of the graduation process. In my opinion I could not deliver as good a quality if things went differently in the planning of as well the research project and the project plan.
Bibliografie


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Table of Contents

Appendices .................................................................................................................. 2

Appendix I: Orientational Interviews ........................................................................ 2
Interview with Mark Mobach – Lector Facility Management ........................................ 2
Interview with Rixt Froentjes – of Communication Kenniscentrum NoorderRuimte .... 4

Appendix II: Knowledge sharing Mind-map ................................................................. 6
Appendix III: Theory of Nonaka and Takeuchi ............................................................ 7
Appendix IV: Short open interviews ............................................................................ 10

Appendix V: Face-to-face knowledge sharing methods ................................................ 23
Face to face meetings ................................................................................................. 23
Open space ................................................................................................................ 23
World café ................................................................................................................ 23
Knowledge fair .......................................................................................................... 24
Chat or talk shows .................................................................................................... 24
Yellow pages ............................................................................................................. 24
Speed geeking ........................................................................................................... 25
Samoan circle ............................................................................................................ 25
Line-up ..................................................................................................................... 26
Icebreakers .............................................................................................................. 26
Group facilitation ..................................................................................................... 27
Graphic facilitation .................................................................................................. 28
Dotmocracy ............................................................................................................. 28
Fish bowl .................................................................................................................. 28
DeBonos six thinking hats ....................................................................................... 28
Peer Assists ............................................................................................................. 29
After Action Reviews ............................................................................................... 31
Retrospect ............................................................................................................... 32

Appendix VI: Virtual knowledge sharing .................................................................... 34
Online Communities ................................................................................................. 34

Appendix VII: Draaiboek wereldcafé 16 mei in Bureau NoorderRuimte ....................... 36
Appendix VIII: Invitation Mini-symposium ................................................................ 50

Appendix IX: Programme International Conference .................................................. 52
Appendices

Appendix I: Orientational Interviews

Interview with Mark Mobach – Lector Facility Management
The interview took place on the 28th of February 2013.

How do you see the topics knowledge sharing and the organizational culture of KCNR?
He expressed that his perspective on things, is only his personal perspective and because he is a researcher he is continuously busy with looking for patterns to see how people behave and what there is more to know about different topics.
KCNR is currently in a transit stadium with the start of bNR, where I as a student am part of, and where the multidiscipline’s are central. Students, lectures, PhD students and researchers take part in the ‘new way of working’ at KCNR this is a big improvement on how it was before, people are able to meet and discuss. At KCNR students experience communication mainly on micro level which means discussions/meetings between student and lecturers. The next level in Mobach’s opinion is integration: in the now situation working together and discovering how to work together in the best way, so that in the future it will be self-evident. In the future it will be the case that it is clear that with multiple study disciplines a better outcome would be assured to solve different cases.

In what sector is KCNR positioned and how can it develop?
KCNR is part of the research sector and the role of bNR within KCNR needs to develop more by making a connection between research by student, researchers of KCNR and communities of practice. When there is looked at a specific theme for example healthcare, a group of 6 students tackle a theme and that all of them individually work out their view upon the case with the help of experts, professional and lecturers the student can become expert him/herself because to level of knowledge will be upgraded in this way. There is room for more development in this way of working and in what the right cases are to give out to students to research which connects with the multiple disciplines of KCNR and the studies courses. Structure is necessary here, and when the topics keep on develop and when more study disciplines join KCNR, bNR will develop even more.

How do you see knowledge sharing at KCNR?
Sharing knowledge/ expertise is a complicated topic, transfer of knowledge is a topic where a lot is written about already. There is a ‘real’ world and a virtual world, the virtual world plays a very big role and especially nowadays. Mr. Mobach expresses that happens within the topic ‘knowledge sharing’ is too big to capture within his eyesight. People are continuously online and therefore knowledge sharing happens all the time but cannot be seen and captured all the time, this is the virtual network. The fact that there is a website which shows texts, photo’s and video’s that are open for everybody, that are externally available for everybody also for the students of bNR, is the first step. All the knowledge products that are produced and published creates a data storage that if you are looking for some information and searching the web is the first step of ‘knowledge sharing’. Publications can be consulted at any time for years and years, it works a little like a library. Mr. Mobach stated this is also the case with his publications, articles etc people can read them at any time because it is out in the open in the web.
Looking at knowledge sharing as it happens today, especially that of experts for instance a lunch and learn meeting, something will be presented by for instant a PhD student and this is very interesting for these experts, it gives them the opportunity to learn from each other is this setting.

How takes knowledge sharing place by means of events?
In the transfer of knowledge to put it into practice KCNR has the ‘Krimp-café’ which is about the shrinkage of population, where people in the northern area of the Netherlands for instance in a church in a small village in Friesland are invited to join a meeting where for example an interesting person from an special expertise gives a presentation of hosts a discussion about the shrink of population or empty buildings and re-addressing of those. These events are executed to create a connection between the government, population and professionals. When looking at KCNR and bNR to the seminar constructions that are already held and are open to the specific study disciplines there is room for development in Mobach’s opinion. These seminars are useful for KCNR and without trying to get people to attend the event; people should know that it is valuable to attend.

I mentioned that the method that is mainly used momentarily is one-way communication and what Mr. Mobach would see that could develop more when thinking about two-way communication and if he feels that interactive methods would work more effectively. Mark Mobach quoted Frank van Genne ‘the society is too much concentrated on transmitting’ when everybody is transmitting knowledge, nobody is listening. There could be done so much more when people really learn to listen to each other. As KCNR they should take upon interaction to bring the KC to the next level and to bring individuals to the next level. Being in the newspaper as KC or as HG opens the way for interaction at the most.

Mr. Mobach expresses that he was in the newspaper a few weeks before this interview date and that still people because of that start ‘sending’ back to him and from that he gets new insight into topics and new cases arise. He feels that as being staff they do not realize what the possibilities are especially in ICT, the methods there are unprecedented of intensity to interact on knowledge. There is a lot more to develop and to discover in this area.

What is more to develop is the ‘Twitter-culture’, to become more active and send messages if KCNR has something to share about a certain topic to create opportunity for interaction.

What is internally already organized by means of events?
The physical events that are already held are for instance seminars, lunch & learn, and the krimp-café. My question to Mr. Mobach was if he sees there is more to develop in this area. Mobach mentioned that this is something where they are currently developing is ‘the week of the empty building’ which is a known event in Rotterdam and he wants to bring it to Groningen and create an own version. It will be a 3 day event where the whole event-programme will be held in an empty building.

The seminars that are now held by the different schools Mobach would like to see to be brought back into KCNR. The international seminar that is held every year could be an example to KCNR to organize an international space seminar with interesting people from the field who will share their ideas and knowledge such as Franklin Bekker.
The best of both worlds of KCNR and the specific study discipline would be that every discipline finds its own niche to have these international seminars and to program it in such a way that it is open to all students and employees of all study disciplines. The only thing what needs to be research is on what kind of capacity you want to direct. Choices are needed because capacity is not endless, direction is needed on for example all second year students.

**Interview with Rixt Froentjes – of Communication Kenniscentrum NoorderRuimte**

The interview took place on the 7th of March 2013.

<table>
<thead>
<tr>
<th>What kinds of communication methods are already executed?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website</strong></td>
</tr>
<tr>
<td>- Projects</td>
</tr>
<tr>
<td>- Sub-sites</td>
</tr>
<tr>
<td>- Agenda &amp; news</td>
</tr>
<tr>
<td>- Lectors</td>
</tr>
<tr>
<td><strong>Knowledge café</strong></td>
</tr>
<tr>
<td>- Internally</td>
</tr>
<tr>
<td>- Externally</td>
</tr>
<tr>
<td>- Relevant topics; ‘krimp’ (shrinkage of population)</td>
</tr>
<tr>
<td>- Workshops; active, cases, how do they see it?</td>
</tr>
<tr>
<td>- Interaction/discussion with involved people</td>
</tr>
<tr>
<td>- More in-depth</td>
</tr>
<tr>
<td><strong>Lunch conference</strong></td>
</tr>
<tr>
<td>- Interesting for experts</td>
</tr>
<tr>
<td>- To know who does what</td>
</tr>
<tr>
<td><strong>1x monthly</strong></td>
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<tr>
<td>- Research results presented</td>
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<tr>
<td><strong>Mini symposium</strong></td>
</tr>
<tr>
<td>- Projects market</td>
</tr>
<tr>
<td>- Target group: third year students, researchers, lectors, project-assigners – government, communities</td>
</tr>
<tr>
<td>- PR; to show, create awareness</td>
</tr>
<tr>
<td>- What’s next?</td>
</tr>
<tr>
<td>- New research; continuation, development</td>
</tr>
<tr>
<td><strong>Publications</strong></td>
</tr>
<tr>
<td>- Brochure</td>
</tr>
<tr>
<td>- Press-publications</td>
</tr>
<tr>
<td><strong>Knowledge circles</strong></td>
</tr>
<tr>
<td>- Excursions</td>
</tr>
<tr>
<td>- Target group: KCNR, relevant external parties</td>
</tr>
<tr>
<td><strong>Network meetings</strong></td>
</tr>
<tr>
<td>- Binds KCNR</td>
</tr>
<tr>
<td>- Give out information</td>
</tr>
<tr>
<td>- Direct question from the field</td>
</tr>
<tr>
<td>- Interaction (not only sending)</td>
</tr>
<tr>
<td>- Experience</td>
</tr>
<tr>
<td>- Zoom in on research:</td>
</tr>
<tr>
<td>Coming to good products together</td>
</tr>
<tr>
<td>See how it works in the field; share added value</td>
</tr>
<tr>
<td>Relevant to a case</td>
</tr>
<tr>
<td>What can different parties do for each other?</td>
</tr>
</tbody>
</table>

Anke Noordhoek
What would Froentjes like to see to develop?
A total overview needs to be created on what the objectives are and what the cohesion is. Where KCNR is doing it all for needs to become clear; what all the student researches are and what the multidisciplinary cases are from the field.
Her vision on development for KCNR on the short term is the revision of the communication plan to make it up to date to new standards and the current trends and methods.

Why is chosen for a particular communication method?
Froentjes questions herself why it would be interesting and enjoyable for people and whether it is relevant. Next to that, she considers if there is news value and if KCNR can profile itself with it.

When is chosen to throw an event?
Certain things will be questions whether it is valuable to throw an event. Is the topic interesting/creative enough? How can it become fun and interesting? Does it make people and myself enthusiastic and do I understand to topic/core?

What is the most important reason why there is chose to hold a physic event?
The opportunity to have real contact/interaction with colleagues, experts, students and professionals is the most important. To be able to do, practice and experience it yourself you can notice whether it delivers something.

How is the collaboration between the different knowledge centres of the Hanzehogeschool?
Froentjes expresses that the collaboration is disappointing. More synchronization and knowledge communication is needed, however about these issues are treated multiple times but takes a lot of time to process.
The knowledge centres work aside of each other and they are even re-inventing the wheel sometimes which is not very efficient and effective.
Froentjes would like to see that a knowledge base will be developed which will be open for access for everybody and that has a clear and practical database. Next to that that it has overview with what we have and do by means of an agenda and thesis overview.
This all by means of the same guideline for all knowledge centres by use of the same system which fits to the target group. The mediatheek needs to play a big role in publications rights and in the open access. The overall idea is that the framework will be the same and therefore easy to use.
Appendix II: Knowledge sharing Mind-map
This mindmap shows the different ways and methods of knowledge sharing. It has been used to get a clear picture about the topic.

Figure B: Mindmap on sharing knowledge and expertise (Noordhoek, 2013)
Appendix III: Theory of Nonaka and Takeuchi

The following explanations of the four different modes of Nonaka and Takeuchi are retrieved from (Nonaka & Takeuchi, 1995) to support the explanation of the method of research in the preliminary research chapter.

“Socialization” is a process of sharing experiences and thereby creating tacit knowledge such as shared mental models and technical skills. An individual can acquire tacit knowledge directly from others without using language. The key to acquiring tacit knowledge is experience. Without some form of shared experience, it is extremely difficult for one person to project her- or himself into another individual’s thinking process. The mere transfer of information will often make little sense, if it is abstracted from associated emotions and specific contexts in which shared experiences are embedded.

“Externalization” is a process of articulating tacit knowledge into explicit concepts. It is a quintessential knowledge-creation process in that tacit knowledge becomes explicit, taking the shapes of metaphors, analogies, concepts, hypotheses, or models. Attempting to conceptualize an image, its essence is expressed mostly in language – written is an act of converting tacit knowledge into articulable knowledge (Emig, 1983). Yet expressions are often inadequate, inconsistent, and insufficient. Such discrepancies and gaps between images and expressions, however, help promote “reflection” and interaction between individuals. The externalization mode of knowledge conversion is typically seen in the process of concept creation and is triggered by dialogue of collective reflection.

“Combination” is process of systemizing concepts into a knowledge system. This mode of knowledge conversion involves combining different bodies of explicit knowledge. Individuals exchange and combine knowledge through such media as documents, meetings, telephone conversations, or computerized communication networks. Reconfiguration of existing information through sorting, adding, combining, and categorizing of explicit knowledge (as conducted in computer database) can lead to new knowledge. Knowledge creation carried out in formal education and training schools usually takes this form.

“Internalization” is a process of embodying explicit knowledge into tacit knowledge. It is closely related to “learning by doing”. When experiences through socialization, externalization, and combination are internalized into individuals tacit knowledge bases in the form of shared mental models or technical know-how, they become value assets.

For explicit knowledge to become tacit, it helps if the knowledge is verbalized or diagrammed into documents, manuals, or oral stories. Documentation helps individuals internalize what they experienced, thus enriching their tacit knowledge. In addition, documents or manuals facilitate the transfer of explicit knowledge to other people, thereby helping them experience the experiences of others indirectly (i.e. “re-experience” them).

The content of the knowledge created by each mode of knowledge conversion is naturally different. Socialization yields what can be called “sympathized knowledge”, such as shared mental models and technical skills. Externalization outputs “conceptual knowledge”, created through metaphor and
analogy between a sphere and the concept. Combination gives rise to “systematic knowledge”, such as a prototype and new component technologies. Internalization produces “operational knowledge” about project management, production process, new product usage, and policy implementation.

In the following article of (Nicosord, 2011) the model of Nonaka and Takeuchi is explained very clearly therefore it is used as a support to the theory of the method of research.

Nonaka and Takeuchi knowledge management cycle

**What this is all about?**

Modelling *knowledge management* is one big issue for those who are in charge of gathering information, documents, professional experiences and know-how at a corporate level.

Nonaka's and Takeuchi's relevant work should allow you to understand easily and clearly how knowledge may be dealt with, transforming tacit knowledge into more explicit forms. This is one of the most famous model existing, maybe the easiest and the clearest.

"The Nonaka and Takeuchi KM model focuses on knowledge spirals that explains the transformation of tacit knowledge into explicit knowledge and then back again as the basis for individual, group, and organizational innovation and learning." (K. Dalkir)

The Nonaka and Takeuchi Knowledge Spiral

![Nonaka and Takeuchi Knowledge Spiral](image)

Source: Nonaka and Takeuchi, 1995

**First step: Socialization (tacit-to-tacit)**

Much knowledge, perhaps 80%, lies in people's brains. The aim for the knowledge worker is to find ways to collect this tacit knowledge. Socialization consists of sharing knowledge through social interactions.

People hold indeed know-hows, secrets, personal skills that will never be shared if none work on it. It is very important to try to gather this knowledge by socializing, that is, using **face-to-face communication** or better, **share experience directly at work through 2 roles: the tutor and the apprentice**. It involves arriving at a mutual understanding through the sharing of mental models.

Anke Noordhoek
That way, there will be little risk that the know-how of your company leaves at the same time of employees’ retirement.

Socialization is a very effective means of knowledge creation, maybe one of the easiest but nevertheless the more limited. It is also very difficult and time-consuming to disseminate all knowledge using this mode only.

**Second step: Externalization (tacit-to-explicit)**

The process of externalization (tacit-to-explicit) gives a visible form to tacit knowledge and converts it to explicit knowledge. It can be defined as "a quintessential knowledge creation process in that tacit knowledge becomes explicit, taking the shapes of metaphors, analogies, concepts, hypotheses, or models" (Nonaka and Takeuchi, 1995). In this mode, individuals are able to articulate the knowledge and know-how and, in some cases, the know-why and the care-why.

An intermediary is often needed to execute this process. For instance, we can consider a journalist who is the typical person able to interview knowledgeable individuals in order to extract, model, and synthesize in a different way (format, length, ...) and thereby increase its scope (a larger audience can understand and apply this content now).

**Third step: Combination (explicit-to-explicit)**

Combination is the process of recombining discrete pieces of explicit knowledge into a new form.

No new knowledge is created at this step. It is rather to improve what we have gathered so far, to make synthesis or a review report, a brief analysis or a new database. The content has been basically organized logically to get more sense, consolidated.

**Fourth step: Internalization (explicit-to-tacit)**

The last conversion process, internalization, occurs through diffusing and embedding newly acquired and consolidated knowledge. In some way, internalization is strongly linked to "learning by doing".

Internalization converts or integrates shared and/or individual experiences and knowledge into individual mental models. Once internalized, new knowledge is then used by employees who broaden it, extend it, and reframe it within their own existing tacit knowledge.

The habits have been changed. (Nicosord, 2011)
Appendix IV: Short open interviews

To come to a good analysis of the current situation the opinions and visions of the students and coaches of bNR had to be measured on how they see knowledge sharing in the organization. It started off with casual conversations about how knowledge sharing should take place in the physical form. The summary of these outcomes are summed up in table D1 and the complete outcomes can be found in table D2 and D3.

Table D1: Summary short interview outcomes

<table>
<thead>
<tr>
<th>Knowledge sharing at bNR currently:</th>
<th>- Everyone operates solo</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>- Not enough knowledge sharing events organized</td>
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<td></td>
<td>- No interest in the currently organized events</td>
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<td></td>
<td>- Not optimally made use of the possibilities of knowledge sharing at bNR</td>
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<td></td>
<td>- Individualistic culture</td>
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<td></td>
<td>- Informal through conversations – share research content and issues you run into</td>
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<td></td>
<td>- Groups from same study discipline meet each other for advice and knowledge sharing</td>
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<tr>
<td></td>
<td>- Lunch&amp;learn meetings visited poorly and minimal input of student</td>
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<td></td>
<td>- No initiative is taken</td>
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<td></td>
<td>- Only question and answer (Q&amp;A) when knowledge sharing face-to-face</td>
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<td></td>
<td>- Could be done better – too busy with arranging the organization</td>
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<td></td>
<td>- No time for knowledge sharing – process orientated</td>
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<td></td>
<td>- Way of working is ‘School’ oriented</td>
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<td></td>
<td>- Extra bNR assignment and COI-groups</td>
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<td></td>
<td>- Only during project-work</td>
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<td></td>
<td>- Experts not very available</td>
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<td></td>
<td>- No structure</td>
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<td></td>
<td>- Topics of events not appealing to the students of bNR</td>
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<td></td>
<td>- Available reports upstairs at KCNR in A1.03</td>
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<tr>
<td></td>
<td>- Teamwork between bNR students and Senior co-workers of KCNR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical event forms of knowledge sharing:</th>
<th>- Lunch&amp;learn but less formally, knowledge-quiz</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>- Presentation rounds of the Plan of Approach for students of bNR (after 4-6 weeks)</td>
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<td></td>
<td>- Presentations on current research of KCNR</td>
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<td></td>
<td>- Obligatory lunch&amp;learn – brainstorm</td>
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<tr>
<td></td>
<td>- Knowledge café and lunch&amp;learn – information transfer because of timeframe, no time for a real discussion</td>
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<td></td>
<td>- Intervision – interaction with lectors and researchers</td>
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<td></td>
<td>- Validation meetings with students and clients (to talk about the current state of business of the research executed – value</td>
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</tbody>
</table>
sufficient?)
- Discussion with senior co-workers
- Group discussion – reception
- Brainstorm and presentation days on research progress
- Half-term presentations
- Regular feedback moments

<table>
<thead>
<tr>
<th>Future of knowledge sharing at bNR:</th>
<th>Obligatory knowledge sharing events</th>
</tr>
</thead>
<tbody>
<tr>
<td>- In the future all students know from each other where he or she is working on and what kind of qualities the students have. This makes it easier to make use of each other's knowledge. (presentation rounds)</td>
<td></td>
</tr>
<tr>
<td>- Obligatory lunch&amp;learn every day from 12.00 - 12.30</td>
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<tr>
<td>- Digital knowledge centre of KCNR and digital overview on who is working on what</td>
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<tr>
<td>- More direction on knowledge sharing</td>
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<tr>
<td>- Make knowledge domains – for which knowledge you should be with whom</td>
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<tr>
<td>- Theme lunches</td>
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<tr>
<td>- Organize less but bigger project assignments with multiple students</td>
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<tr>
<td>- Excursions organized by students of bNR</td>
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<tr>
<td>- Workshops with the topic ‘Research’</td>
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<tr>
<td>- Interaction in the field of all sorts of subjects whereby the initiative lies with all involved parties – students and lectors</td>
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<tr>
<td>- Bigger graduation-groups to stimulate collaboration from different study disciplines</td>
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<tr>
<td>- Introduce theme-weeks to define research content</td>
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<tr>
<td>- Overview on who does what, and who has what to offer</td>
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<tr>
<td>- Poster presentation</td>
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<tr>
<td>- Knowledge sharing by means of media – Short interactive movies about the different research projects</td>
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<tr>
<td>- Avoiding individual research but work in project groups</td>
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<tr>
<td>- Bring in structure</td>
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<tr>
<td>- More interaction between different research projects</td>
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<tr>
<td>- Organize ‘share’ days</td>
<td></td>
</tr>
<tr>
<td>- Continuation in inviting external guest to share their knowledge, expertise and experiences</td>
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</tr>
<tr>
<td>- Generate Community of Practice (COP)</td>
<td></td>
</tr>
<tr>
<td>- More natural knowledge sharing through structure and accomodation</td>
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</tbody>
</table>

The following introduction is used in these casual conversations about knowledge sharing at bNR.
My research is about knowledge sharing and how events can contribute to this at bureau NoorderRuimte (bNR). Knowledge sharing is central at bureau NoorderRuimte and therefore I am researching how this can be done best through a physical event. What are good forms of events where knowledge can be shared optimally at bNR in your opinion?

Table D2: Opinions about future forms of physical knowledge sharing events

<table>
<thead>
<tr>
<th>Forms of events</th>
<th>Reasoning</th>
<th>Stated by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorm</td>
<td>Interactive, when sharing knowledge interaction needs to be central</td>
<td>Anne</td>
</tr>
<tr>
<td>Lunch gathering</td>
<td>Interaction, informal atmosphere</td>
<td>Anne</td>
</tr>
</tbody>
</table>
| Short presentation / Pitch | First introduction of the topic  
Later the possibility to interact / add on  
Viewpoint from others (students, coaches, clients)  
Share experiences  
Format/blueprint needs to be created on how it should be done | Arjan     |
| bNR facebookpage        | Every day somebody needs to post something about their research, activities, update, questions etc.  
Per person involved, 4 times in the whole graduation period | Arjan     |
| Brainstorm session      | Using each other’s knowledge in a creative way                             | Maarten   |
| Lunch gathering         | Expert who gives information about his/her expertise  
Later on, people from different disciplines and expertise can react and share knowledge | Maarten   |
| Workshops               | Small groups (4-5 people) in discussion  
Learn fast because of small scale discussion  
Hold on to a particular theme/subject  
Workshop followed by a reception (to give the possibility to discuss further in a informal way) | Ruben     |
| Gathering               | General part followed by a discussion/workshop                             | Ruben     |
| Pitch                   | According to photographs (pecha kucha)  
Role-plays (Bono method)                                           | Ruben     |
| Friday afternoon reception | Get discussions going in a informal way                                    | Sam       |
| Lunch gathering         | Involve everyone who is present (everybody has to eat)                    | Sam       |
| Brainstorm              | You can apply so many different methods for several outcomes (5-3-5 method) | Sam       |
| Interactive session     | Interaction between all working groups  
Keep all possibilities and answers open                               | Sam       |
| Pitch                   | Input of ideas and opinions according to the research question of students | Sam       |
At the hand of the following three questions the opinions and visions of the involved people of bNR are retrieved to create a clear image how they see bNR as a knowledge sharing organization.

- **How do you see knowledge sharing at bNR at the moment?**
- **What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**
- **What is the future of knowledge sharing at bNR? And what kind events are linked with that?**

Table D3: Short Interview responses on Knowledge sharing at bNR

<table>
<thead>
<tr>
<th>Short Interview responses</th>
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</table>

| Koen Wegstapel – Student bNR FM | I think that in the ideal situation everybody who executes a research at bNR should organize a kind of lunch&learn meeting which is obligatory. Preferably twice during the whole placement period, one time in the middle of the process and one time at the end of the period. When you set this as “obligatory” at the acceptance of application of the students, than everyone will know where they are up to. I think the quality will be influenced positively when people discuss their own work in groups and receive feedback from other professionals. When you involve everyone in your research progress, I believe that there will be a greater involvement amongst people. People know from each other where they are occupied with and cooperate, brainstorm and think with each other sooner. At this moment I have the feeling that everyone is operation solo. A lunch&learn meeting is of course already an existing form, but you can introduce it less formally. If at the beginning of the period is indicated that everybody needs involve other people of bNR in their own research in an original manner, you keep the playfield open. I think for example of the organization of a knowledge-quiz for supporting your research, with the goal of asking critical questions and see if people can add up to the research process. In the current situation of bNR not enough physical events are organized to share knowledge in my opinion. Lectors come over every now and then to give a presentation about subjects where my interest does not go out to at all. |
I would find it much more interesting if for example the students of bNR would show the initiative to do something like that. I think that it would turn out positively for the whole group of bNR. Within bNR there are a lot of study disciplines and at the moment this is not put into good use. In my opinion it is the power of bNR that there are a lot of study disciplines active. We should make a lot more use of each other, by giving updates to each other obligatory. This can be done in the form of a lunch&learn meeting, brainstorm sessions etc. Knowledge sharing will be accorded its full weight if moments of knowledge sharing are set obligatory.

<table>
<thead>
<tr>
<th>Arjan Koolhaas – Student bNR V&amp;M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How do you see knowledge sharing at bNR at the moment?</strong></td>
</tr>
<tr>
<td>At this moment I think that the possibilities to knowledge sharing are not made use of optimally. It is a shame that a lot of knowledge is available but is not made use of. For myself I only know from the students where I am together in the COI group with what kind of study discipline they do and which research they are executing. I do not know from the other students and lectors who are walking around here where they are working on.</td>
</tr>
</tbody>
</table>

|  |
| **What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?** |
| To let knowledge sharing take place optimally I think that there are multiple possibilities. At first it seems useful to let all students present their Plan of Approach after approximately 4-6 weeks. Afterwards feedback can be given, and questions can be asked back and forth. Secondly it seems useful to me that also the lectors and clients present their field of research a bit more thoroughly so everyone knows the story behind all research topics. |

|  |
| **What is the future of knowledge sharing at bNR? And what kind events are linked with that?** |
| In the future all students know from each other where he or she is working on and what kind of qualities the students have. This makes it easier to make use of each other’s knowledge. An event which can be linked with this is a morning and/or afternoon with presentation whereby all students present their qualities and clarify their research in short. Students will know from each other where they are up, and who to reach out to if necessary. |

<table>
<thead>
<tr>
<th>Robin Doezé – Student bNR TP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How do you see knowledge sharing at bNR at the moment?</strong></td>
</tr>
<tr>
<td>I see knowledge sharing at bNR as something informal, if you sit next to someone with (another) background and you start a conversation about the research he or she executes. Afterwards you tell something about your own research and the issues you run into.</td>
</tr>
</tbody>
</table>

|  |
| **What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?** |
| I think it is advisable to have everyone block a half hour in their agenda, for example from 12.00 to 12.30pm, to have lunch together. Not providing food, but everybody brings their own lunch and just sit together. When this |
becomes a standard people will talk about their research and share their ideas and knowledge.

What is the future of knowledge sharing at bNR? And what kind events are linked with that?

Something like a digital knowledge centre should be created where people put their data/projects and where they can find data/projects easily. Next to that, in the placement programme a clear subdivision should be available where you can see who is executing which research project. In this way you approach people if you need to know something about their field of expertise and you know then which knowledge is where to find.

<table>
<thead>
<tr>
<th>Gea Posthumus – Coach bNR FM</th>
<th>How do you see knowledge sharing at bNR at the moment?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Since I work only two mornings at bNR I find it hard to answer this question, so I will try to declare what I observe these days (when I am mostly in meetings also): I am getting the impression that some groups of students (mostly from the same study discipline) meet each other for advice and knowledge sharing. I believe it stays within these clusters of students. The lunch&amp;learn meetings are visited poorly and the input of the placement students is minimal. There should be given much more direction on knowledge sharing, but how this should be done I do not know yet. Make knowledge domains visible to all involved people (so for which knowledge, you should be with who), organize theme lunches (think along, discuss and brainstorm etc.)</td>
</tr>
</tbody>
</table>

What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?

Events on a theme, not to big, in discussion form and in a relaxed atmosphere such as theme lunches. Very big events with a lot of information, where is not a lot of space given to talk on and the discussion do not deliver much.

What is the future of knowledge sharing at bNR? And what kind events are linked with that?

In line with the previous answer. A1.03 as a base, but now and then also another surrounding for a new impulse.

<table>
<thead>
<tr>
<th>Anne van der Haar – Student bNR ABC</th>
<th>How do you see knowledge sharing at bNR at the moment?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Knowledge exists mainly out of working together during the researches. Not much initiative is taken by the placement students of bNR concerning presentations or spread information by own initiative. It is more face-to-face if someone needs information from another, so questions and answer (Q&amp;A).</td>
</tr>
</tbody>
</table>

What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?

By organizing lunch&learn meetings where students present or show their
research (obligatory?). By involving others by asking questions or brainstorming you get interactive knowledge sharing and you take other people along in your research subject which can be important in a research.

**What is the future of knowledge sharing at bNR? And what kind events are linked with that?**

I would organize less, but bigger project-assignments, whereby you produce a product with for example 5 students that need each other to bring it to a good end. Events could be days where every group his or her project shares with the others. Or excursions organized by the placement students of bNR.

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**Mirjam Post – Coach bNR FM**

**How do you see knowledge sharing at bNR at the moment?**
The knowledge sharing can be done better. This is caused by we are still too busy with the arrangement of the organization. We are still too process-orientated to be working on knowledge sharing. If we, as bNR, function a little longer we as a team can focus on that more. Of course the students are very focused on graduation and their own research. We need to think about how we can make it a system that students also take part in sharing of the knowledge.

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

A knowledge-café and lunch&learn meetings are good forms of information transfer. It is not really knowledge sharing, mostly because of the timeframe, often too short to have a discussion about the subject. Events in the form of intervision would do it great in my opinion. Also in interaction with lectors en researchers. We have to do more obligatory sessions where we put students together with clients in validation gatherings to talk about the current state of business of the research executed. What is the value of what you delivered so far, is the client waiting for that, or does it need to be adjusted? Next to that, to my idea there should be organized more workshops with the topic ‘research’, but also personal development topics etc. We do this too much in college form now still.

**What is the future of knowledge sharing at bNR? And what kind events are linked with that?**

Interaction in the field of all sorts of subjects whereby the initiative lies with all involved parties. So the students organize and also the lecturers do this.

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**Steven Moes – Student bNR MER**

**How do you see knowledge sharing at bNR at the moment?**
At the moment I see knowledge sharing mainly through lunch&learn meetings and presentations. Besides that, there is some knowledge sharing, in my eyes, through the different extra bNR assignments and the COI-groups.

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

More in discussion with the other (senior) workers, this because it is very
separated at the moment. Show more interest in each other’s projects would improve knowledge sharing as well.
Bigger graduation-groups to stimulate the collaboration and also knowledge sharing from out the different study disciplines.

*What is the future of knowledge sharing at bNR? And what kind events are linked with that?*
Gatherings to define your research and to start a discussion with as well students (junior) as senior-workers. Possibly introduce theme-weeks within bNR.
Moreover I think it could have added value if a board will be hanged-up where the strengths and research topics of co-workers will be stated, so you know easily who is busy with what, and who has what to offer. Taking the initiative faster to see another co-worker of bNR because of their knowledge and improving knowledge sharing.

**Ruben de Jong – Student bNR**  
**HT**

*How do you see knowledge sharing at bNR at the moment?*
Knowledge sharing during working on the project, I work closely together with Jesmer Kuiper on a project, whereby mainly knowledge is shared between our study disciplines.
Other than that, there is now and then a moment (mostly at the beginning or end of the day) that a few bNR students / workers sit together in a group and share his or her knowledge on doing research.

*What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?*
It depends what kind of knowledge you want to share. If you want to share practical knowledge about doing research, a group conversation/ reception will work best I think.
If you want to share research results you can do this by means of PowerPoint presentations or poster-presentations.

*What is the future of knowledge sharing at bNR? And what kind events are linked with that?*
In the future of bNR I see that with more use of media things will be executed (eg. video-images). For example a short/ interactive movie can be made of every research. These short videos are fun to watch then and easy to share with other researchers and third parties.

**Fabian Koczula – Student bNR**  
**FM**

*How do you see knowledge sharing at bNR at the moment?*
On one side I think that enough is organized at the moment by means of try-out assignments, lunch&learn meetings, presentations and extra bNR assignments. On the other hand it is hard for me to obtain knowledge about my research within bNR because I am executing a marketing research and at bNR there are no experts in that field. I do find that the extra bNR a big plus in the program, however this should be mentioned at an earlier stage. The students are now too busy themselves with their research to give the fully
100% and thus share knowledge optimally.

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

I would organize brainstorm sessions about the progress of the different research-projects to get in this way input from other students. Moreover I would organize presentation-days where students can present the progress of their research and possible bottlenecks where they deal with. On these aspects they can receive feedback from the other students. Also the extra bNR assignments should stay in practice; however these should be indicated already in the beginning of the placement semester so students can take this along in their project-planning. This all should take place at bNR itself.

**What is the future of knowledge sharing at bNR? And what kind events are linked with that?**

I would avoid as many individual researches as possible as it is now. So more working in project-groups and do individual assignments within. There will be always a covering team whereby problems and bottlenecks can be made visible.

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**Lisette Hidding – Student bNR FM**

**How do you see knowledge sharing at bNR at the moment?**

At the moment I see that very few to no practice of knowledge sharing is taking place at bNR. Only now and then between students and lectors knowledge sharing takes place, but there is no structure to be find and also not enough things are shared with everyone. For instance; I do know that upstairs in A1.03 many reports and papers are documented there, but I do not really put attention to that. During coaching I notice that knowledge is shared, but this is mainly about sharing on where everyone is busy with.

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

In a workshop where information is shared. Brainstorm moments, where information is shared which flow over into a discussion during the brainstorm. Lunch&learn meetings, where experiences and researchers are shared, questions can be asked and the information goes from one to another.

By applying these actions more knowledge sharing will take place, also because if find that a structure needs to be brought in to share knowledge optimally. Without a structure not much knowledge sharing takes place apparently.

**Saskia Zonneveld – Student bNR FM**

**How do you see knowledge sharing at bNR at the moment?**

Knowledge sharing takes place informally at the moment. Lunch&learn meetings take place, but these are not part of my field of specialism. Because of that I do not remember many things of what is said during these
meetings. The research lectures are of course also a form of knowledge sharing, however this is singular transfer of knowledge from lecturer to student. The bNR assignments whereby collaboration is a necessity and from that you learn more about what the other knows but not necessarily take over knowledge.

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

I find this very hard to formulate because it is not my field of expertise. However I think that more informal moments needs to be created where people can have a conversation so you can discover what the other knows and this makes it easier to approach people to make use of their knowledge. I think keeping each other updated on what you are doing can also contribute to the process for example by half-term presentations.

**What is the future of knowledge sharing at bNR? And what kind events are linked with that?**

To make knowledge sharing possible it needs to be clear who possesses what knowledge. I believe at first need to be thought of way how to map this out. I think lunch&learn meetings are a fun way to share knowledge, but I have the feeling that the topics do not often match with what currently keeps the students of bNR busy.

<table>
<thead>
<tr>
<th>Erwin Slotboom – Student bNR SABC-BK</th>
<th><strong>How do you see knowledge sharing at bNR at the moment?</strong></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>The contact is going through lunch&amp;learns meetings, brainstorm sessions, and COI-groups. The multi disciplinary working relation consists out of try-out assignments, extra bNR assignment and a graduation project.</td>
</tr>
</tbody>
</table>

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

The inter connection at brainstorm sessions; the brainstorm about Urban Farming in this period is a good example. COI-group meetings, hereby you help each other by sharing your knowledge.

**What is the future of knowledge sharing at bNR? And what kind events are linked with that?**

More interaction, this could be done between different research projects.

<table>
<thead>
<tr>
<th>Wolbert van der Haar – Student bNR SABC-BK</th>
<th><strong>How do you see knowledge sharing at bNR at the moment?</strong></th>
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<tbody>
<tr>
<td></td>
<td>Lunch&amp;learn meetings, interaction/ conversations between students, COI-group meetings, thesis reports that are available upstairs in A1.03 and lectures.</td>
</tr>
</tbody>
</table>

**What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?**

Lunch&learn meeting, thesis bank at bNR and brainstorm sessions with experts with the reflection of the audience.
What is the future of knowledge sharing at bNR? And what kind events are linked with that?

A lecture where is shown how you can find existing literature in the literature bank about your chosen research subject.
A mandatory lunch&learn meeting of every research topic.
Teamwork between senior and junior co-workers.

Wilfred Soer – Student bNR
MER

How do you see knowledge sharing at bNR at the moment?
Knowledge sharing happens now in between working on projects, drinking coffee- and smoking breaks. Many things about bottlenecks and frustrations are discussed amongst each other and everyone tries to help each other by giving his or her point of view. Every now and then brainstorm sessions are organized, however only when the student request it.

What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?
This could take place at a brainstorm session, lunch&learn meetings and/or Friday-afternoon reception. Next to that, meetings/ gatherings could take place which are agreed upon beforehand. Whilst drinking a cup of coffee, someone could bring their bottlenecks to the table where he or she runs into in short. Then people can provide him or her with feedback on the particular issue with their point of view. This could be done as well orally as on paper.

What is the future of knowledge sharing at bNR? And what kind events are linked with that?
Create more situations where this could be possible, like a lunch&learn meeting, Friday-afternoon reception and a regular feedback moment.
The regular feedback moment under the management of the client and/or graduation tutor from out bNR who assesses the student skills. I would like to see this be implemented soon.
The Friday-afternoon reception and lunch&learn meeting can be organized when there is need and/or request for.

Maarten Klaassen – Student bNR
IFM

How do you see knowledge sharing at bNR at the moment?
As something which is just part of bNR and what is expected of us to do. Maybe also as something which should have been the driving force of bNR?

What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?
Brainstorm sessions, lunch&learn meetings
“share” days: where everyone gives a short presentation about their project so that the other students and/or coaches can think along.

What is the future of knowledge sharing at bNR? And what kind events are linked with that?
A lot more interaction between junior co-workers (students) but also senior
<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Position</th>
<th>How do you see knowledge sharing at bNR at the moment?</th>
<th>What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?</th>
<th>What is the future of knowledge sharing at bNR? And what kind events are linked with that?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert Vos</td>
<td>Student bNR</td>
<td>Does not occur much.</td>
<td>Friday-afternoon reception</td>
<td>Multi-disciplinary assignments, where there is room for multiple disciplines and where overlap originates. In this case you cannot go around ‘knowledge sharing’. Next to that, regularly plan in a moment whereby in an informal way, for example at a reception, knowledge can be shared with co-bNR people.</td>
</tr>
<tr>
<td>Arjan Spakman</td>
<td>Student bNR</td>
<td>At this moment, knowledge sharing takes mostly place by means of making appointments with people and obtain knowledge on these moments from someone. Yet sharing knowledge spontaneously does not happen really.</td>
<td>Reception, discussion and a brainstorm-session</td>
<td>In the future I would like to see knowledge sharing in a more interactive way between senior- and junior co-workers. This on a more informal way, so not only when an appointment is made, but also by walking around and ask questions spontaneously. This could give shape to a form whereby a sort of walk-around session can take place for all co-workers every week. It is also important that all junior co-workers are informed of the knowledge which the senior co-workers have and/or practice. It would be great if this happens in the introduction week, with a round where people introduce themselves.</td>
</tr>
<tr>
<td>Saskia Wiepkema</td>
<td>Management Assistant KCNR</td>
<td>By means of different kind of gatherings that are organized and the mutual communication between bNR students and bNR coaches/ coordinators.</td>
<td>Forms whereby knowledge sharing earlier took place were for instance the presentations/brainstorms of ‘urban farming’ and the world-café. Next to that, the lunch&amp; learn meetings, knowledge-café and the mini-symposium. The location of NoorderRuimte, A1.03 is suitable for several consultation-forms and presentations.</td>
<td></td>
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</tbody>
</table>
What is the future of knowledge sharing at bNR? And what kind events are linked with that?
Several consultation-forms and presentations. At events also possibly (continue) inviting external guests to present, share knowledge and exchange experience.

<table>
<thead>
<tr>
<th>Steven de Boer – Coach bNR HT</th>
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<tbody>
<tr>
<td>How do you see knowledge sharing at bNR at the moment?</td>
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</tbody>
</table>
Knowledge lunches but besides that knowledge sharing is very limited I believe.

What are physical forms of events where knowledge sharing can take place optimally at bNR, and should take place in your opinion?
Inter-disciplinary projects, generate COP’s (Community of Practice) with lectors, researchers, students, external parties and conferences.

What is the future of knowledge sharing at bNR? And what kind events are linked with that?
More natural knowledge sharing through structures and accommodation (COP, inter-disciplinary projects with products and material pasted on the wall) congresses/conferences with extern people involved.
Appendix V: Face-to-face knowledge sharing methods

How can I organize face to face meetings differently? How can I make scientific meetings more engaging and participatory?

Face to face meetings
Face to face (F2F) meetings give us the chance to talk with and listen to each other. Too often we waste this precious time simply disseminating information in speeches, where few talk and many listen. From a knowledge sharing perspective, there are many other options to enhance knowledge sharing every time we get together, from regular team meetings to infrequent, large global gatherings. This entry into the toolkit on F2F meetings is a bit different from other method entries, because we'll explore how to use some of the other methods mentioned in the toolkit for meetings, as well as think about meeting design and how we can better share knowledge at our meetings.

When to use:
- Regular in-house meetings
- Meetings with external partners and stakeholders
- Professional and association meetings

Open space
Open Space (also known as Open Space Technology or OST) is a method for convening groups around a specific question or task or importance and giving them responsibility for creating both their own agenda and experience. It is best used when at least a half to two full days are available. The facilitator's key task is to identify the question that brings people together, offer the simple process, then stand back and let participants do the work.

When to use:
- Problem solving - bringing stakeholders together to understand a problem and seek a shared solution.
- Strategic planning - Identifying goals and actions.
- Sharing and synthesizing knowledge - reflecting on what has been learned and understanding how it applies to work going forward.
- Community, team and network building - working together in small and large groups to help build relationships - secondary benefit

World café
The World Café is a whole group interaction method focused on conversations. A Café Conversation is a creative process for leading collaborative dialogue, sharing knowledge and creating possibilities for action in groups of all sizes. The environment is set up like a café, with paper-covered tables for four supplied with refreshments. People sit four to a table and hold a series of conversational rounds lasting from 20 to 45 minutes about one or more questions which are personally meaningful to them. At the end of each round, one person remains at each table as the host, while the other three travels to separate tables. Table hosts welcome newcomers to their tables and share the essence of that table’s conversation so far. The newcomers relate any conversational threads they are carrying -- and then the conversation continues, deepening as the round progresses.
When to use:

- Sharing experience, sorties or project results
- Problem solving
- Planning

Knowledge fair
Knowledge fairs are face to face events in which participants set up displays to share their undertakings. Knowledge Fairs can be internal to an organization or open to partners and the public. They are "free-flowing, open, flexible, and non-hierarchical.... People can see what is happening, can interact with each other, and can see what others are doing. It has the same characteristics as a medieval fair, mixing up all different levels and types of people in a variety of interaction." Knowledge fairs can be designed for internal and/or external audiences.
A Knowledge Fair aims to:

- Provide opportunities for multiple parties to broadcast their achievements, exhibit their products, and market new programs to donors, policymakers, other institutes and potential partners.
- Facilitate face to face networking and promote South-North exchange on common agendas.
- Help people benefit from each other’s experiences.
- Stimulate interest in future collaboration and the development of new programs.

When to use:

- As part of annual meetings or gatherings.
- At a country, community or global level to share the current status of work or a project.
- To bring the concept of knowledge sharing to life, to show staff, management, clients and other partners what is being done to share development knowledge
- To foster informal networking and problem solving.

Chat or talk shows
The chat show encourages participants to share experiences in an informal, fun environment. Because it requires minimal preparation of participants, the chat show can be initiated in a workshop where participants don’t yet know each other or the organisers. The chat show's open circle layout encourages greater participation than a fishbowl and, due to its informal nature, and is less intimidating than a panel discussion.

When to use:

- An alternative to a keynote or formal podium presentation
- A chance to weave ideas between participants and dig down for key issues.
- A way to draw out stories from people without them having to do a lot of preparation.

Yellow pages
Consider the expression "we know more than we can tell." An important way of tapping into organizational knowledge is to know whom to contact to learn what they know, particularly their contextual and tacit knowledge. One way to accomplish this within an organization is by use of a staff Yellow Pages or directory. These also are known as "White Pages," "Expertise Locator Systems" or "Staff Directories."
The ODI Toolkit describes them in this way: "Organisational Staff Profile Pages systems are electronic directories which store information about staff in a given organisation. In addition to providing information such as names, job titles, groups and contact details, staff pages include details about knowledge, skills, experience and interests, and even hobbies. As these systems are electronic, they are especially valuable in organisations that have geographical or other barriers to personal connections. For this reason, they are often used as the cornerstone point of systematic knowledge and learning initiatives in development and humanitarian organisations. At their most useful, staff pages have the potential systematically to facilitate connections that might otherwise happen only randomly, leading to valuable new collaboration opportunities. On a day-to-day level, effective staff pages enable and improve the brief, fluid connections across an organisation that are at the heart of the learning organisation."

When to use:

- Indicating people geographic, topical or skill expertise
- Mobilizing people in emergency response.
- Finding mentors and coaches within the organization.

**Speed geeking**

Speed Geeking (also known as Speed Dating) is a large group method to quickly expose participants to a new information about any topic: programs, theory, technology, etc. It can be adapted to other types of content as well, but the focus is on short exposure to something new as presented by someone with deep, practical experience in the topic area, tool or method.

When to use:

Speed geeking can be used when there is limited time and there are many things to look at and discuss. The limited time (normally between 10 - 15 mins) keeps the presentations short, focused and to the point.

**Samoan circle**

"The Samoan circle is a leaderless meeting intended to help negotiations in controversial issues. While there is no ‘leader’, a professional facilitator can welcome participants and explain the seating arrangements, rules, timelines and the process. As with the Fishbowl process, the Samoan circle has people seated in a circle within a circle, however only those in the inner circle are allowed to speak. The inner circle should represent all the different viewpoints present, and all others must remain silent. The process offers others a chance to speak only if they join the ‘inner circle’

When to use:

It is a useful method to promote listening as the outer circle is not allowed to speak, but participants are still free to speak if they move into the inner circle. When participants are tired of a given seating arrangement, the Samoan circle gives a new cohesive vision of the group: everybody sitting in a circle concentrating on the listeners.

For example, I used this method in an office retreat to allow listening by Management to the views of all participants who wished to speak.
Line-up
The facilitator frames an issue to a spatial continuum (possibly represented by a rope) and asks the participants to position themselves anywhere along this continuum according to their perceived closeness to one of the 2 opposite extremes of it. Once everybody is still in the chosen position, the facilitator can pick some comments from participants who are in a remarkable - literally - position and optionally ask the participant to reposition themselves after having heard the comments, to check whether they've changed their mind.

When to use:
This method ie aim of this method is to quickly grasp "who" your group is with regards to some specific relevant issues. It can be easily tailored to serve various needs, from simply surveying people attitudes, to evaluation, to decision making, to conflict management (see examples below). Being so simple, easy and quick, and yet very powerful, it can be used quite swiftly without a lot of preparation/instruction on the participants' side. Another advantage is the high involvement of the participants, who are required to quit the comfort of their chairs and be part of the activity with their whole body, not just the head. This also implies that you "fluidify" the setting, as the participants will have more chance to exchange with many others than if you had them stay in the same position or group, and identify those that are like-minded, so that new collaborations can follow.

Icebreakers
Icebreakers are short group activities that allow the various people inside a new group:

1. to get to know each other;
2. to become more comfortable with discussing the topic of groupwork; or
3. to become more comfortable with expressing dissenting views.

When to use:
Use icebreakers at the start of a group activity to engage them to get to know each other and establish relationships for the rest of the gathering. Icebreakers can also be used if a group of people who know each other well feel embarrassed because they have to tackle a difficult or new subject together.

Marc Steinlin posted an important strategic message about Icebreakers on the KM4Dev list in October, 2008 and wrote "I think it's important that you consider carefully, what you want to create as foundation of the workshop to come. In my experience - and that of others - you have the first 30-60 minutes to establish a "culture" and set the tone for the entire rest of the workshop. Ie. if you want people to carefully listen to each other, you have to make them doing that in the beginning. If you want them to interact and create networks of relationships, they should have a first opportunity to do so. This is why conventional openings with key notes are so detrimental - they immediately create a climate of talking heads, disengagement, boredom - and afterwards organisers are surprised if participants don't listen, don't participate, don't engage..."
Group facilitation

Group facilitation is aimed to enable groups and organizations to work more effectively; to collaborate and achieve synergy. The facilitator is a content neutral party who by not taking sides or expressing or advocating a point of view during the meeting, can advocate for fair, open, and inclusive procedures to accomplish the group’s work.

"Group facilitation is a process in which a person whose selection is acceptable to all the members of the group, who is substantively neutral, and who has no substantive decision–making authority diagnoses and intervenes to help a group improve how it identifies and solves problems and makes decisions, to increase the group’s effectiveness."
Roger Schwarz ‘The Skilled Facilitator’ quoted by IAF - International Association of Facilitators

When to use:

For many professionals, a facilitator is someone who assures that the meeting is on track, determines whose turn it is to speak during open discussions, and makes sure that the sessions start and end on time. The Facilitator’s Guide to Participatory Decision-Making introduces the reader to other dimensions of facilitation, such as designing realistic meeting agendas, achieving full participation, promoting mutual understanding, and helping groups build inclusive, sustainable agreements. The book serves as a manual for starters as well as a sourcebook for trained, professional facilitators.

- Group Facilitation Norms
- Everyone participates, not just the vocal few.
- People give each other room to think and get their thoughts all the way out.
- Opposing viewpoints are allowed to exist.
- People draw each other out with supportive questions. “Is this what you mean?”
- Each member makes the effort to pay attention to the person speaking.
- People are able to listen to each other’s ideas because they know that their own ideas will also be heard.
- Each member speaks up on matters of controversy. Everyone knows where everyone stands.
- Members can accurately represent each other’s point of view. – even when they don’t agree with them.
- People refrain from talking behind each other’s backs.
- Even in the face of opposition from the person-in-charge, people are encouraged to stand up for their beliefs.
- A problem is not considered solved until everyone who will be affected by the solution understands the reasoning.
- When people make an agreement, it is assumed that the decision still reflects a wide range of perspectives.

Graphic facilitation

"Every child is an artist. The problem is how to remain an artist once we grow up." - Pablo Picasso

Graphic recording at its core is visually capturing what is happening in a group or presentation. It is part of a large set of visual practices which use images as part of group processes, which includes graphic facilitation, collaborative graphics work, etc. It can be used as a literal recording or it can be used as a visual element of a specific group and/or facilitation process.

When to use:

- To capture highlights of a talk, presentation or meeting
- To use as a facilitation tool with a particular method
- As a participatory tool engaging others in the creation of shared images either through drawing, collage etc.

Dotmocracy

"Dotmocracy is an established facilitation method for collecting and prioritizing ideas among a large number of people. It is an equal opportunity & participatory group decision-making process. Participants write down ideas and apply dots under each idea to show which ones they prefer. The final result is a graph-like visual representation of the groups collective preferences."

Fish bowl

Fishbowls involve a small group of people (usually 5-8) seated in circle, having a conversation in full view of a larger group of listeners. Fishbowl processes provide a creative way to include the “public” in a small group discussion. They can be used in a wide variety of settings, including workshops, conferences, organizational meetings and public assemblies. Fishbowls are useful for ventilating “hot topics” or sharing ideas or information from a variety of perspectives. When the people in the middle are public officials or other decision-makers, this technique can help bring transparency to the decision-making process and increase trust and understanding about complex issues. Sometimes the discussion is a “closed conversation” among a specific group. More often, one or more chairs are open to “visitors” (i.e., members of the audience) who want to ask questions or make comments. Although largely self-organizing once the discussion gets underway, the fishbowl process usually has a facilitator or moderator. The fishbowl is almost always part of a larger process of dialogue and deliberation.

When to use:

- As an alternative to traditional debates
- As a substitute for panel discussions
- To foster dynamic participation
- To address controversial topics
- To avoid lengthy presentations.

DeBonos six thinking hats

The Thinking Hats exercise is a kind of role-play in which different perspectives are represented by hats of different colours. When a participant is symbolically wearing a specific hat, they must seek to perceive the situation through the lens associated with that colour. This method shows how different aspects of one’s personality can approach a problem differently.
It is a tool that assists in the critical analysis of complex situations by simulating diverse points of view in a controlled environment. It helps to achieve more comprehensive perspectives and sounder solutions, by forcing the participants to step outside the limits of their standard thought processes and points of view.

When to use:

- To explore diverse opinions and decisions
- To minimize confrontation (in some cases paradoxically emphasising confrontation through role-playing)
- To illustrate distinct perspectives
- To examine hypothetical consequences
- To form comprehensive strategies or scenarios
- To become more respectful and aware of different opinions
- This method is normally used in the context of training and can be considered a training technique.
- When you have some participants who have a tendency to stick to a certain profile. i.e., when someone is always negative.

The following 3 methods are retrieved from (Faul & Camacho).

**Peer Assists**

Learn from the collective experience of your peers.

A peer assist is a meeting that brings together a group of peers to get feedback on a problem, project, or activity. The meeting seeks to learn from participants' knowledge and experience with topics related to the problem, project or activity. A peer assist can happen before an activity to help with the planning process, or during an activity to help steer the direction.

### How can Peer Assists help you do your job better?

| ✓ learn how others would approach your issue | ✓ learn new approaches or methods to solving problems |
| ✓ develop ideas and solutions to your problems with the collective input of your peers | ✓ develop stronger bonds with your colleagues |
| ✓ gain input and insights from people outside your team | |

### How do you do a Peer Assist?

**Before the Peer Assist**

1. Clarify the purpose and define the specific challenge or problem for which you are seeking help.
2. Come up with a clear statement about the challenge or problem.
3. Talk about your peer assist plans with a colleague to help refine
your plans.
4. Identify a facilitator\(^1\) to lead the discussions (can be self-facilitated).
5. Set a time and date for your Peer Assist.
6. Invite participants with a diversity of knowledge, skills and expertise, tailored to the objectives of the peer assist.

<table>
<thead>
<tr>
<th>During the Peer Assist</th>
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<tbody>
<tr>
<td>7. Explain the purpose of the peer assist to the group.</td>
</tr>
<tr>
<td>8. Describe the context, history and future plans regarding the problem or challenge.</td>
</tr>
<tr>
<td>9. Describe the problem or challenge and provide a clear question or problem statement.</td>
</tr>
<tr>
<td>10. Encourage participants to ask questions for clarification; and provide feedback by discussing what they heard, and what else they need to know.</td>
</tr>
<tr>
<td>11. Ask participants to consider what they have learned and will apply from the event.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After the Peer Assist</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Prepare an action list at the end of the meeting for follow-up activities.</td>
</tr>
<tr>
<td>13. Consider who else might benefit from the lessons learned and share the results with them (provide contact names for follow up discussions).</td>
</tr>
</tbody>
</table>

Example(s)

Nancy Dixon (author of “Common Knowledge”) demonstrates the peer assist with a story from British Petroleum (BP). BP has approximately 50 exploration teams working around the world. These teams consist of seismologists, geologists, petroleum engineers, environmentalists and other technical experts whose task is to assess potential drill sites and advise the company on whether to invest in drilling. In Dixon's example, Helen's team of five had been working on a site for nine months, and was unable to arrive at a recommendation. She called a peer assist by asking each member of her team for the names of three or four people "whose thinking you really trust in your area."

Armed with a list of 15 or 20 names, Helen called an assist at a particular place and time. Not everyone was available but about five came. At the session, Helen started by defining "the things we would like you to help us with." Each member of her team then presented his or her problems to the group. They explained the procedures they had followed, the tests they had run and the results that may have been puzzling them.

Their peers were then asked to synthesize what they'd heard. "We're interested in recommendations," they were told, "but also in what we might have overlooked." Participants were quick to respond with queries and eager to provide parallel instances from their own experience.

\(^1\)A facilitator helps the group to ensure that the goals of the Peer Assist are achieved, by keeping discussions on topic, and helping to manage the flow of interactions between participants.
The peer assist, as Dixon says, is interesting because experts are not called to make presentations about what they know. They are told, "Here is our problem," and asked, "What do you know that fits our problem?"

It's far more efficient than reading 65 reports, she says. What Helen and her team got pertained just to their problems. The peer assist also works, Dixon says, because it is not reported to management. "This was not an audit, not a review. You don't have to hide anything because this isn't going to be reported."

**After Action Reviews**

Learn more from your events, projects & activities

An after action review (AAR) is a meeting to capture lessons learned immediately after an event, project, or an activity.

<table>
<thead>
<tr>
<th>How can AARs help you do your job better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ learn how you can do an action better the next time by reviewing and learning from the process</td>
</tr>
<tr>
<td>✔ analyze what didn't work the way it was supposed to work, to improve processes for your ongoing &amp; future activities</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How do you do an AAR?</th>
</tr>
</thead>
</table>
| **Before the AAR**   1. Identify a facilitator\(^2\) to help create an open environment, promote discussion and draw out lessons learned.  
2. Set a time and date for your meeting.  
3. Invite all members of the work team to participate in the AAR. |
| **During the AAR** 4. Explain the purpose of the AAR to the group.  
5. On a flipchart, write the details of "what was supposed to happen" in the activity/project/event.  
6. Ask if the group agrees with “what was supposed to happen".  
7. Discuss with the group **why** those were the objectives of the activity.  
8. Discuss with the group **what actually happened** and **why**.  
9. Discuss **why were there differences**.  
10. Discuss **what worked, what didn't work** and **why**.  
11. With the group, identify **what you would do differently next time**, and come up with **Specific Action Items** as recommendations for future actions. |

\(^2\)A facilitator helps the group to ensure that the goals of the Peer Assist are achieved, by keeping discussions on topic, and helping to manage the flow of interactions between participants.
After the AAR 12. Create a document to capture details or the AAR, and recommendations. Circulate the document to all AAR participants for their comments and feedback. After incorporating participants' feedback, share the document with other colleagues.

The template below is provided as a guide, which you may want to customize.

<table>
<thead>
<tr>
<th>Name of Event</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Event</td>
<td></td>
</tr>
<tr>
<td>One or two sentences giving the background</td>
<td></td>
</tr>
<tr>
<td>Individual(s) who called the AAR</td>
<td></td>
</tr>
<tr>
<td>AAR Participants</td>
<td></td>
</tr>
<tr>
<td>AAR Facilitator</td>
<td></td>
</tr>
<tr>
<td>Key Words (maximum of 10 that would enable future users to re-find this learning)</td>
<td></td>
</tr>
<tr>
<td>Key Dates (the years that the learning was acquired)</td>
<td></td>
</tr>
<tr>
<td>Specific Actionable Recommendations (SARs)</td>
<td>Quotes</td>
</tr>
</tbody>
</table>

Retrospect
Learning after your events, projects & activities

A retrospect is an in-depth discussion that happens after the completion of an event, project, or an activity to capture lessons learned during the entire activity. A retrospect helps individuals involved reflect upon and learn what happened, why it happened, what went well, what needs improvement and what lessons can be learned from the experience.

How can a Retrospect help you do your job better?

- Learn how you can do a similar activity better the next time by reviewing the process and lessons learned
- Bring closure to your project or activity, and inform an evaluation process
- Learn as much about your project or activity from your team before they disband
- Create a documented review of your project process

How do you do a Retrospect?
### Before a Retrospect
1. Identify a facilitator\(^3\) to help create an open environment, promote discussion and draw out lessons learned.
2. Set a time and date for your meeting.
3. Invite all members of the team to participate in the Retrospect.

### During a Retrospect
4. Introduce the topic of the Retrospect, and ensure that all participants are clear about the objectives of the Retrospect.
5. Identify and review the objectives and deliverables of the project.
6. Identify and review the project plan and planned process.
7. Discuss what went well and why.
8. Discuss how what worked can be applied in the future.
9. Discuss what could have gone better, and why.

### Report on Results
10. Once the document is complete, make sure that it is circulated to all retrospect participants for their comments and feedback.
11. Circulate the recommendations to other staff for their use and reference.
12. Revisit the recommendations at a later date so they continue to inform your work.

The template below is provided as a guide, which you may want to customize.

<table>
<thead>
<tr>
<th>Name of Event</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Event</td>
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<tr>
<td>One or two sentences giving the background</td>
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<td></td>
</tr>
<tr>
<td>Specific Actionable Recommendations (SARs)</td>
<td>Quotes</td>
</tr>
</tbody>
</table>

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\(^3\)A facilitator helps the group to ensure that the goals of the Peer Assist are achieved, by keeping discussions on topic, and helping to manage the flow of interactions between participants.
Appendix VI: Virtual knowledge sharing

Online Communities
Tapping into the collective knowledge of a group

Online Communities are groups of people who interact in an online environment to discuss and share resources around a common topic. One type of online community is a Community of Practice (CoP), which are “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, 2002).

<table>
<thead>
<tr>
<th>How can COPs help you do your job better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Tap into the knowledge of a large community of experts who are passionate about a topic</td>
</tr>
<tr>
<td>✓ Share your ideas, questions and issues and get feedback from the community</td>
</tr>
<tr>
<td>✓ Connect with people from outside your group or organization to learn from the experiences of others</td>
</tr>
<tr>
<td>✓ Interact quickly and efficiently with people in virtual communities</td>
</tr>
<tr>
<td>✓ Build community identity and reputation for networking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How do you do use COPs?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participating in COPs:</strong> COP participants get involved in varying levels. Some people “lurk” in groups to listen-in on discussions and learn from the contributions of others. Other people make occasional contributions in response to others, or with their own inputs. Some participants are very active, with regular contributions to discussions, sharing content, or in organizing face-to-face events. Your level of participation should be determined by your passion and interest to get involved. You can find a listing of many different online communities, discussing a range of different development topics through Dgroups (a partnership supporting development dialogues)</td>
</tr>
<tr>
<td><strong>Organizing COPs:</strong> Organizing a new COP is a more complicated and time consuming process that requires a lot of dedication and commitment. Before deciding to start a new COP, first determine if there is potential:</td>
</tr>
<tr>
<td>- What is the primary intent of the community?</td>
</tr>
<tr>
<td>- Is there already a community that already exists?</td>
</tr>
<tr>
<td>- Do you have a group of interested participants that are passionate about the topic?</td>
</tr>
<tr>
<td>- For management buy-in the CoP should support core organizational functions (top management buy-in is a helpful but not sufficient condition for the success of the CoP).</td>
</tr>
</tbody>
</table>
• Identify a facilitator(s) to lead the discussions, and potential key contributors (or champions)

**Getting started with your COP (role of the facilitator):**

- Identify engaging issues that people will be passionate about, as specific topics for discussion.
- Mobilize or redirect efforts that are already there: link to or empower existing groups
- Have a plan of action for moving forward with your COP – what you (and the group) would like to achieve, or help participants achieve
- Initiate community events and spaces (regular face-to-face meetings, online meetings, online group space)
Appendix VII: Draaiboek wereldcafé 16 mei in Bureau NoorderRuimte

Datum en tijd
16 mei 2013 van 13.30 - 16.00 uur

Locatie
Hanzehogeschool Groningen, Bureau NoorderRuimte: zernikeplein 11 (lokaal A1.03).

Uitnodiging

Op 16 mei 2013 organiseert Xporelab van de provincie Drenthe samen met bureau NoorderRuimte een wereldcafé wat in teken staat van de Kijkrichtingen die het Planbureau voor de Leefomgeving (PBL) heeft ontwikkeld en hoe die gebruikt zijn om o.a. tot ideeën voor realisatie van natuurdoelen te komen en om natuurbeleid op een andere en meer elgertijdse manier te communiceren. Er zijn 4 Kijkrichtingen: Vitale Natuur, Beleefbare Natuur, Functionele Natuur en Inpassbare Natuur.

Tijdens een informeel hapje en drentje openen wij graag een brainstorm met jullie. Voor dit wereldcafé nodigen wij u daarom graag uit!

Datum: 16 mei 2013
Locatie: Kenniscentrum NoorderRuimte, Van Doorerveste, Zernikeplein 11, Lokaal A1.03
Tijd: 13.30 - 16.00
**Voorbereiding voorafgaand aan workshop**

<table>
<thead>
<tr>
<th>Wat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget bepalen eten en drinken</td>
</tr>
<tr>
<td>Eten en drinken regelen, inkopen voor het wereldcafé 16 mei</td>
</tr>
<tr>
<td>Bel/gong regelen voor afsluiting elke ronde</td>
</tr>
<tr>
<td>1 laptop en 1 tv (voor A1.03) en een flip-over reserveren</td>
</tr>
<tr>
<td>Natuurvisies uitprinten op A0 en de poster ‘Waar, wat en waarom?’ 1 maal op A0, en op A3 voor elke tafel 1 (4stuks)</td>
</tr>
<tr>
<td>Top 3 plus alle andere ideeën samenvoegen</td>
</tr>
<tr>
<td>‘Rapport’ mailen naar M. Westerhof en J. Akse</td>
</tr>
</tbody>
</table>

**Voorbereiding op dag van workshop, 19/05**

| posters (5 stuks) en A3 natuuvisies, flip-over klaarzetten |
| grote zaal inrichten: tafels als eilanden opstellen |
| laptop, beamer en flap-overs klaarzetten |
| presentaties op laptop zetten |
| stiften, plakband en instructies voor begeleiders van subgroepen klaarleggen |
| Wekker (stopwatch) |

**Budget Wereldcafé 16 mei**

Een aantal dingen zullen van te voren ingekocht moeten worden voor het Wereldcafé van 16 mei. Hieronder een geschat budget, wij zijn in afwachting van jullie akkoord.

Omdat het Wereldcafé in een informele setting gehouden wordt zal er bier, wijn en borrelhapjes aanwezig zijn. Uiteraard is er ook de mogelijkheid om koffie en thee te drinken. De dingen die geadviseerd worden om ingekocht te worden zijn als volgt:

- 3 kratjes bier (aanbieding prijs in de desbetreffende supermarkt)
- 3 flessen witte wijn (weinig vrouwen zijn aanwezig bij KCNR - Anke)
- €30,- aan borrelhapjes (die ochtend inkopen doen bij de Aldi – Anke)

Het totaal zal dan rond de €75,- liggen, dit kan voorgeschoten worden (door Anke) en later nadat de totale kosten duidelijk zijn met bonnetjes terug overgemaakt worden door Xporelab – Provincie Drenthe.
Programma van workshop
13:15 – 13.30 Inloop

13.30 – 14.00 Welkom, introductie door provincie Drenthe (M. Westerhof en J. Akse)
- Deelnemers welkom heten
- Belang van project aangeven
- Uitleg 4 kijkrichtingen, missie/visie Drenthe en begrip ‘biodiversiteit’ uitleggen.

14.00 – 14.15 Ronde 1
- Brainstorm over één van de visies kijkrichtingen

14.15 – 14.20 Samenvatten ronde 1
- Kort de eerste ronde samenvatten

14.20 – 14.35 Ronde 2
- Samenvatting presenteren van de eerste ronde, kort en helder
- Brainstorm over één van de visies kijkrichtingen

14.35 – 14.40 Samenvatten ronde 2
- Kort de tweede ronde samenvatten

14.40 – 14.55 Ronde 3
- Samenvatting presenteren van de tweede ronde, kort en helder
- Brainstorm over één van de visies kijkrichtingen

14.55 – 15.00 Samenvatten ronde 3
- Kort de derde ronde samenvatten

15.00 – 15.15 Ronde 4
- Samenvatting presenteren van de derde ronde, kort en helder
- Brainstorm over één van de visies kijkrichtingen

15.15 – 15.20 Samenvatten ronde 4
- Kort de vierde ronde samenvatten

15.20 – 15.45 Samenvattend (top 3 per tafel, of terugkerende visies), afsluiting
- Samenvatten gevonden top 3, of terugkerende visies
Deelnemers bedanken

De deelnemers van het wereldcafé krijgen van te voren te horen aan welke tafel er kan worden gezeten gedurende de verschillende rondes, de samenstelling van deelnemers veranderd per ronde. In totaal zijn er vier tafels, voor elke natuurvisie is er een tafel ingericht op deze natuurvisie, en aan de tafel wordt er gebrainstormd over de natuurvisie.

De deelnemers leveren met behulp van de kijkrichtingen ideeën voor de realisering en actualisering van het Drentse natuur- en landschapsbeleid:

1. Beleefbare natuur, Groene leefomgeving
2. Functionele natuur, Duurzaam gebruik
3. Inpasbare natuur, Meer lusten en minder lasten
4. Vitale natuur, Natuurlijke processen en biodiversiteit

Setting in elke subgroep

- 1 tafel met daarop grote vellen papier (van een flip-over bord)
- Per tafel; 1 gespreksleider en 1 persoon die de ronde steeds samenvat
- Op elke tafel ligt 1 natuurvisie van Planbureau voor de leefomgeving, 1 A4tje met instructies voor de begeleiders en papier voor de persoon die de ronde samenvat
- aan de muur hangen 4 posters met kijkrichtingen (A0) en de poster ‘Waar, wat en waarom?’ (de referentiekaart en de kijkrichtingen)

Werkwijze bij elke ronde, per tafel

- De gesprekleid(st)er neemt het initiatief in de subgroep en begeleidt de deelnemers

- De persoon die samenvat, geeft vanaf ronde 2, een korte samenvatting van de ronde ervoor (max. 3 minuten) zodat de nieuwe groep op deze ideeën verder kan brainstormen.

- De gesprekleid(st)er vraagt de deelnemers de opdracht uit te voeren:
  - ‘Geef minstens 5 suggesties om het Drentse natuur- en landschapsbeleid voor het thema ... beter te realiseren of te actualiseren’; twee voorwaarden:
    - gebruik de kijkrichtingen, maar eigen ideeën zijn ook welkom
    - besteed aandacht aan het eindbeeld (‘wat’), de opgave waarop het beeld een antwoord geeft (‘waarom’) en de maatregelen die nodig zijn om het beeld te realiseren (‘hoe’)

- Per ronde zal de persoon die samenvat kort de ronde samenvatten
**Tijdschema afgelopen weken**

<table>
<thead>
<tr>
<th>Wie</th>
<th>Wat</th>
<th>Wanneer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groep natuur herijking</td>
<td>Sturen plan van aanpak naar provincie Drenthe</td>
<td>24-04</td>
</tr>
<tr>
<td>Groep natuur herijking</td>
<td>Sturen uitnodiging wereldcafé</td>
<td>08-05</td>
</tr>
<tr>
<td>Sturen draaiboek wereldcafé</td>
<td>Sturen draaiboek wereldcafé naar provincie Drenthe</td>
<td>13-05</td>
</tr>
<tr>
<td>Groep natuur herijking</td>
<td>Beamer regelen</td>
<td>13-05</td>
</tr>
<tr>
<td>Iedereen</td>
<td>Wereldcafé</td>
<td>16-05</td>
</tr>
<tr>
<td>Groep natuur herijking</td>
<td>verslag naar provincie Drenthe mailen</td>
<td>17-05</td>
</tr>
</tbody>
</table>

**Visie**

- SABC
- Inspiratie
- Beleid
- Uitvoering
Resultaten

16 mei heeft het wereldcafé met succes plaatsgevonden. Mensen van bNR en het kenniscentrum waren erg enthousiast over de opzet en de gezellige sfeer. Het kennisdelen wat een centraal aspect is van de organisatie heef zeker optimaal plaats kunnen vinden deze dag. Een goed voorbeeld voor vele evenementen die nog zullen volgen; de toon is gezet!!

Overzicht gemaakte kosten Wereldcafé t.b.v. Xporelab ‘herijking natuurbeleid’

Printkosten gemaakt door bureau NoorderRuimte

De A0 kopieën zijn €3,- per stuk * 5= € 15,-
De A3 kopieën zijn €0,60 per stuk * 8= € 4,80

Totaal: € 19,80

Kosten eten en drinken, gemaakt door A.S. Noordhoek.

AH €4,26 (wijn + borrel)
Aldi €31,78 (wijn + borrel)
Jumbo €50,67 (bier)
Eurest €3,20 (huren van glazen)

Totaal: €89,91

Verloop wereldcafé

Na in de ochtend alle hapjes voorbereid te hebben en de drankjes te hebben koel gezet kon het wereldcafé langzaam aan beginnen. De posters werden in het groot opgehangen met de natuurvisies erop en de tafel indeling werd neer gezet met daarop.

Doordat er wat minder mensen aanwezig waren werd er gekozen voor een aanpak met 3 brainstorm groepen in plaats van 4 zoals het initiële idee was. Studenten, medewerkers van bNR, medewerkers van KCNR en de mensen van Xporelab liepen mooi door elkaar heen en werkten samen in de 3 verschillende groepen.

Ondertussen kon er een hapje en een drankje genuttigd worden. Zie hieronder wereldcafé in uitvoering en de samenvattingen over de brainstorm sessies over de verschillende natuur visies.
Wereldcafé in uitvoering
Samenvatting Vitale natuur

Bij de kijkrichting vitale natuur gaat het vooral om het verhogen van de biodiversiteit en hoe dit behaald moet worden. Dit was duidelijk terug te zien in de ideeën. Wat voornamelijk vaak werd ingebracht is het idee om grote groen zones te creëren en deze zo goed mogelijk af te schermen voor menselijk toedoen. Dit kan onder andere gedaan worden door een groot hek om de groenzone heen te plaatsen en zo de natuur geheel zijn gang te laten gaan. Er kunnen dan dieren worden uitgezet die er op dit moment niet leven waarna zij in volledige afzondering hun leven kunnen leiden.

Anderen zagen niets in het idee van het hek, omdat de natuur dan als het ware wordt opgesloten. Biodiversiteit wordt positief beïnvloed door een goede verbinding met andere natuur. Zij zagen dus meer in het inschakelen van meer boswachters om het gebied te beschermen of het moeilijk toegankelijk maken van de natuurgebieden, bijvoorbeeld door het niet aanleggen van wegen en paden.

Vervolgens is het mogelijk om groen zones te verbinden door ecologische verbinding zones aan te leggen. Dit gebeurt op dit moment al, maar zou dus in de toekomst ook moeten gebeuren tussen de grote groen zones die de brainstormers voor ogen hadden. Door boeren te betalen voor een deel van hun grond kunnen de groen verbindingen voldoende ruimte krijgen.


Verder werd er nagedacht over het behouden van de huidige dieren en planten en het aantrekken van nieuwe soorten. Zo vinden dieren en planten het prettig als er een meer in de groenzone is. Dit meer zou dus aangelegd moeten worden in het midden van de groenzone als er van nature geen meer is. Ook trekvogels blijven zo langskomen wat een positief effect heeft op het hele natuurgebied. Om de komst van de vogels verder te stimuleren zouden optimale rustgebieden gecreëerd moeten worden door veel water en rust te zorgen.

Overige ideeën waren het aanleggen van safari zones met wilde dieren waar mensen tegen betaling met een kabelbaan overheen kunnen om de dieren te bekijken. Ook werd er gesproken over een structurele aanpassing van de duurzaamheid wetgeving om zo een gedragsverandering te brengen. Dit kan voor boeren en burgers. Zo zou het voor boeren bijvoorbeeld verboden kunnen worden om in bepaalde periodes te maaien, waardoor flora en fauna op het land meer kans krijgt zich te ontwikkelen. Ook kunnen boeren in een regio meekrijgen dat ze niet allemaal hetzelfde gewas verbouwen waardoor de diversiteit in het gebied verhoogd wordt.
Ten slotte nog het idee om te stoppen met het betalen van jagers. Om de wildstand op peil te houden zouden plezierjagers tegen betaling hun gang moeten kunnen gaan. Dit levert geld op en onderhoudt het natuurgebied net zo goed.
Samenvatting

Inpasbare natuur
Recreatiepark aan te leggen waar bij mensen slapen in de natuur, tussen de natuur in boomhutten, zodat ze hier in rust kunnen overnachten. Deze natuur moet niet gemaakt zijn, ruwe natuur moet dit zijn bijvoorbeeld een stuk natuur waar je 10 jaar niets aan kan doen en daarna luxe boomhutten in worden gebouwd. De energie die hiervoor moet worden opgewekt kan doormiddel van duurzame energie worden opgewekt, de bedoeling is dat het recreatiepark zelfvoorzienend wordt. Dit kan doormiddel van wind- en zonne-energie. De investeringen die hiervoor nodig zijn om hiervoor te genereren, kan bijvoorbeeld komen uit houtwinning (productiebos) wat naast de ongerepte natuur is bewerkstelligd. Verder kan het uitgraven van een meer, een toevoeging aan het recreatiepark bieden om hier extra activiteiten te vervullen. En met het opgegraven zand, kan er een berg van worden gemaakt om ook weer aanvullende activiteiten op te kunnen uitoefenen. Verder wordt er ingezet op een schone omgeving en een zelfvoorzienend park. De bestemming kan eventueel als een trekpleister fungeren voor mensen die vliegen op carport Deelde.

Activiteiten
De activiteiten die in het park kunnen worden georganiseerd zijn bijvoorbeeld highland games, zelf jagen doormiddel van een speer (back-to-basic principe). En de prooi kan zelf bereid worden in de gezellige omgeving van een kampvuur. Een andere optie is het beoefenen van survival programma’s in de wildernis.

De doelgroepen
Doelgroepen die naar het park kunnen komen zijn; teambuildingsuitjes, sportievelingen, gezinnen die actief bezig willen zijn. En verder toeristen uit Duitsland of het westen van Nederland die dan kunnen vliegen op carport Deelde.

Randvoorwaarden
De regelgeving moet aangepast worden op het recreatiepark. Verder moet rondom het park de industrie die daar gevestigd is de sticker “donkergroen” hebben, dit kan doormiddel van regelgeving vanuit de provincie en gemeente. Hierbij moeten ondernemers betrokken worden (boeren, bedrijven) om te kijken welke eventuele functie deze ondernemers kunnen hebben binnen het park.

Wellicht kunnen ze participeren in het opbouwen van het park. Of dat de plaatselijke boer grondstoffen aanbiedt voor het restaurant/hotel. Ook kan er worden gekeken naar de combinatie met carport Deelde, bijvoorbeeld samenwerkingsvormen wat de Europese Unie eventueel kan subsidiëren.
Samenvatting Beleefbare natuur & Functionele natuur

Gezondheid
De kijkrichtingen beleefbare- en functionele natuur kwamen eerst aan bij het begrip gezondheid. Hier ging het allereerst om de toegankelijkheid van natuur. Vervolgens kwam het idee dat natuur is om te genezen, en te voorkomen dat je ziek wordt. Dit doormiddel van ontspanning en sport. Ook gezond eten kan onder dit begrip worden geschaard. Hierbij valt te denken aan boomgaarden of een ZEN-tuin. Door al deze ideeën is straks de zorgverzekeraar niet meer nodig.

Een ZEN-tuin is iets dat komt uit Japan. In deze tuin is bijvoorbeeld internet en het mobiele dataverkeer niet mogelijk in het idee. Het gaat allemaal om de ontspanning en de rust. Wellicht straks één van de plekken in Nederland waar geen ‘straling’ te vinden is.

Natuurbeheer door toerist
Een ander punt wat naar voren kwam is natuurbeheer door de tourist. Beleving van de natuur kan door het samen zijn met natuur. Vakantiegangers die hun vakantie genieten in de natuur en daar ook van kunnen leven. Zij moeten ook zorgen voor het nodige onderhoud van de natuur tijdens hun vakantie.

Groot natuurrepark Drenthe
Ander idee is om de natuur gewoon te laten gaan. Voordeel is dat dit niks kost aan onderhoud, nadeel is de achteruitgang van wellicht de biodiversiteit. Er blijven dan nog maar een aantal kernpunten (de grotere steden) over in Drenthe in deze visie. Al het voedsel moet uit de natuur gehaald kunnen worden. Hiermee creëer je een groot, of meerdere, ecosyst(e)m(en).

Een aansluitend idee hierbij is om een grote groenstrook te maken door Europa. Hiermee kunnen ook de grondsoorten worden verbonden.

Zelfvoorzienend
Natuur wordt de rustplek. Je woning staat hierbij in de natuur, het is echter geen vakantiepark. Het functionele hier is dat al het voedsel uit de natuur gehaald kan worden.

Financiering
De ideeën kunnen gefinancierd worden op de volgende manieren:

- Door het gezonder blijven in de natuur worden de zorgkosten lager;
- Bedrijven laten betalen door:
  - Uitleveren GROEN certificaat;
  - Pilot opzetten door stukken grond te verkopen of aan te bieden, hiervoor moet de gemeente kaders opstellen (denk aan behouden biodiversiteit), bedrijven hier op laten bieden.
Foto’s van brainstorm posters
**Bachelor thesis – Knowledge Sharing**

Anke Noordhoek

**Hoe?**

1. grond/natuurgebied beschrijven stellen
2. leiders stellen
3. ondernemers uitnodigen.

**Hoe 2?**

- Laat de natuur zijn gang gaan
- Grote rel. Processeer de 3 maal later
Appendix VIII: Invitation Mini-symposium

UITNODIGING
Minisymposium onderzoeksresultaten 2012-2013
20 JUNI 2013


Het minisymposium bestaat uit twee onderdelen: een aantal inhoudelijke en informatieve sessies waarin lectoren, onderzoekers en studenten gezamenlijk de resultaten van verschillende projecten toelichten en een doorlopende markt, waar studenten de uitkomsten van hun afstudeeronderzoeken presenteren. Doel is het brede scala aan projecten en onderzoeksresultaten te presenteren, kennis te delen en ook toekomstige afstudeerders alvast voor te bereiden op hun afstuderen. Het minisymposium vindt plaats in en rond de nieuwe locatie van het Kenniscentrum NoorderRuimte.

U kunt uw eigen programma samenstellen.

Datum: 20 juni 2013
Tijd: 15.00-17.30 uur
Locatie: Hanzehogeschool Groningen, Zernikeplein 11, Kenniscentrum NoorderRuimte, A1.03

Graag tot 20 juni!
MINISYMPOSIUM 20 JUNI 2013

Informatiemarkt

Meer dan 20 studentenprojectgroepen presenteren deze middag hun onderzoeksresultaten met posters en mondellijn uitleg. Deze informatiemarkt vindt plaats tussen 15.00 en 17.00 uur in het Kenniscentrum NoorderRuimte, A1.03.

Themapresentaties


**Ronde 1 15.15 - 15.45 uur:**

**Presentatie Energie+Dorp in A1.47**

- Het project Energie+Dorp onderzoekt en ondersteunt energiemaatregelen die hun dorp energieneutraal willen maken. In het project wordt een ‘Practical Program’ ontwikkeld, met instrumenten zoals een methode om het energiepotentieel in kaart te brengen, om een enquetekampagne te brengen en om de bereidheid van inwoners om mee te doen te testen, een draaiboek voor communicatie en een workshop voor visuele representatie. In het afgelopen jaar is samengewerkt met lokale initiatieven in Oerkerk, Pekela, Hooghaken, Makkum en Westerbork. De eerste resultaten van de project Energie+Dorp zijn onlangs gepresenteerd door Tineke van der Schoor tijdens de conferentie Sustainable Building 2013 in Oulu in Finland. Een gezamenlijk artikel wordt door Hidco van der Blonk gepresenteerd op de conferentie IST 2013 (over energietransitie) in Zurich.

**Presentatie bureau NoorderRuimte in A1.03**

- Kennisdeel in bij bureau NoorderRuimte, van binnen naar buiten! Bureau NoorderRuimte is de plek binnen het Kenniscentrum waar onderwijs en onderzoek bij elkaar komen. Studenten, docenten, lectoraten en externen werken samen in een community waarin multidisciplinaire teams bezig zijn met interessante onderzoeksonderwerpen van de kennisagenda van het Kenniscentrum. Wat is er nodig om deze opgedane kennis met elkaar te delen? Hoe creëren jullie een optimale omgeving voor? Hoe kan de by community het beste functioneren? Speelt de ruimte daarbij een rol? Dit zijn vraagstukken die zijn onderzocht door junior medewerkers van bureau NoorderRuimte.

**Ronde 2 16.15 - 16.45 uur:**

**Presentatie Energieke Restauratie in A1.47**


**Presentatie Krimp & Leefomgeving in A1.03**


**Projecten en Vragen**

- Voor meer informatie en vragen over het afstuderen en mogelijke onderzoeksprojecten voor het komende studiejaar, kunnen studenten en geïnteresseerde bedrijven/organisaties terecht bij Mirjam Post, Coördinator Bureau NoorderRuimte: m.post@hanze.nl / (0546) 896-46 66.
Appendix IX: Programme International Conference

Programme

9.30 – 10.15 Registration

10.15 – 10.30 Welcome

10.30 – 11.00 **Soki Rhee-Duverne** (Researcher & Conservator) *Building Conservation Department, English Heritage, United Kingdom*

‘the current English Heritage approach and future research on sustainable energy conservation’

11.00 – 11.30 **Dr. Ir. Henk Schellen** (Associate professor Building Physics) *Department for the Build environment, Eindhoven University of Technology, the Netherlands*

‘tensions between energy consumption, thermal comfort and conserving historical values of listen buildings’

11.30 – 12.00 **Dr. Ir. Elena Gigliarelli** (Researcher) *National Research Council, Institute of Technologies Applied to Cultural Heritage, Italy*

‘SECHURBA approach: modeling feasibility for reducing energy consumption in listed buildings’

12.00 – 13.00 Lunch

13.00 – 14.00 Presentation series 1

14.10 – 15.10 Presentation series 2

15.15 – 15.30 Break

15.30 – 16.00 Award for best commissioning client Energetic Restoration 2012

16.00 – 16.30 Closing plenary

16.30 – 17.30 Drinks and networking