



INTELLECTUAL OUTPUT 3.
GUIDE FOR RESEARCHER DEVELOPMENT (GRED)





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SECTION ONE: RESOURCES FOR EARLY CAREER RESEARCHERS





JOURNEY PLOT – Graph of the trajectory

Background – justification.

The Journey Plot was initially created as a non-traditional visualisation method of collecting data and is particularly suited to considering experiences of a lengthy duration (Turner, 2015). It is based on the notion of ‘journey’ that emphasizes an individual’s movement from one place to another. Several events that have a significant impact on the experience take place along the journey (Miller & Brimicombe, 2003).

The graphic representation of the experiences promotes individuals’ recall about the experience, offers guide and structure to the narrative. Moreover, it allows access to the underlying conceptions in relation to the experience, such as what it means for them to do research or do a doctorate (Mazzetti & Blenkinsopp, 2012). The multimodality of the representation (visual and oral) enables interpretation and understanding of the complex changes since it allows researchers and interviewers to relate experiences and interpretations (Mazzetti & Blenkinsopp, 2012). Additionally, it allows them and the participants to contrast the description of the experience with the with its graphic representation (McAlpine, 2016), in order to compare, ask or provide more detail or clarify in situ misunderstandings and inconsistencies (Sala-Bubaré & Castelló, 2017). On the other hand, Journey Plot is a useful tool to clarify, summarise and contrast certain aspects of the trajectory that may remain inaccessible through language, such as the emotional intensity of events, and especially the general overview of the process and trajectory and the changes occur during that time (Turner, 2015). In this sense, it is useful to organise events cronologically. Finally, in research or teamwork contexts, the graph facilitates quick and visual comparison of the trajectory of two or more individuals.

Description of the instrument.

The Journey Plot is a simple graph with two axes, one vertical and one horizontal. The vertical axis represents the intensity of the experience, from very positive to very negative, and the horizontal axis represents the duration of the experience or the period of time to be explored (this axis can include the timescale and temporal divisions or can be left blank). The participant has to draw a line representing the evolution of the intensity of the experience and label the significant events that took place during that period of time.

Used as a pedagogical tool, Journey Plot is presented in the context of an interview, counselling session or training to promote awareness, reflection and sometimes discussion about the positive and negative events, their causes and consequences and the coping and resolution strategies, the tempo, rhythm and intensity of the experience. The ultimate objective is to extract useful learning for the person, for instance, to introduce changes in the management of time and objectives of the thesis; in the participation in training and research activities; or in the coping strategies of negative situations. It is usually used along with a more or less structured protocol of questions that guide the reflection. Below we present a protocol sample (pages 6-7).

Use of the tool for researcher education



This instrument can be used in different moments of the doctoral trajectory. For each moment, its use can address different specific objectives:

- *Beginning of the doctorate.* In the initial stages of the doctorate, the Journey Plot can be utilised to generate and negotiate conceptions, representations and expectations about the thesis, tasks, roles and responsibilities of each actor, share milestones and build the relationship between supervisors and PhD students. In this case, the Journey Plot can be drawn retrospectively, about students' previous trajectory, and prospectively about the expectations and forecast of the trajectory during the doctorate.
- *Intermediate phases.* In intermediate stages, the tool can be employed as a formative evaluation instrument to share meanings about the experiences lived up to that moment, give students feedback about their process and development, revise and adjust expectations, objectives and milestones, redefine roles and responsibilities and regulate the coping strategies.
- *Final phase of the doctorate.* In the final stage of the doctorate, the Journey Plot can be utilised to assess the process and draw conclusions, but also to plan doctoral students' professional trajectory, identify and discuss options and generate and negotiate expectations about their professional future.

The time axis of the Journey Plot (length and period) will need to be modified in relation to the moment the instruments are used and the specific objectives to be achieved. On the other hand, these objectives will also guide the plan of the activity or concrete situation in which the Journey Plot will be employed. In this sense, a series of decisions need to be taken in relation to the content of the Journey Plot, the persons involved in the reflection process and the focus and position the supervisor will take during the activity.

Content of the Journey Plot:

- *Doctoral students' development as a researcher.* Students' learning and development of the competencies as a researcher. The aim is to analyse the progress of the students, the most significant moments during the trajectory (discoveries, setbacks, etc.), resolution strategies, causes and consequences of the significant events and learning that promoted or hindered students' development.
- *Evolution of the thesis.* Evolution of the research (design, data collection and analysis) and the thesis (manuscript, articles). The aim is to analyse the progress of the research, the most significant moments of the trajectory (advancements, discoveries, setbacks, etc.), the resolution strategies, causes and consequences of the significant events in relation to the evolution of the thesis.
- *Evolution of supervisors' experience.* Evolution of supervisors' experience in relation to the supervision of a certain doctoral student. The aim is to analyse the most significant moments of the trajectory (advancements, discoveries, setbacks, etc.), the resolution strategies of the supervisor, causes and consequences of the significant events and learning achieved by supervisors in relation to their development as researchers and supervisors.



Persons involved in the process of reflection:

- *Individual.* The doctoral student and/or the supervisor complete a Journey Plot. Each analyses their graph and reflects on the process individually. Later on, student and supervisor can share the conclusions. The main aim of this modality is to raise awareness about the process.
- *Shared with people not directly involved in the experience.* Shared reflection among peers about the development, experience or thesis of each individual. It can be done in pairs, groups or in seminars and training courses for doctoral students or supervisors. The main aim of this modality is to share similar experiences and resolution strategies and offer and receive emotional support.
- *Shared with people involved in the experience.* Shared reflection between the doctoral student and the supervisor. The main aim of this modality is to contrast the interpretation of the events (causes, consequences, coping...) and share and negotiate meanings, roles and responsibilities.

Focus and position of the supervisor:

- *Mediator of the reflection of the doctoral student.* In this modality, supervisors do not draw a Journey Plot. They can mediate students' reflection, asking questions and offering their interpretation, or participate in the shared reflection about the Journey Plot drawn by students.
- *Perception of the experience of the doctoral student.* In this modality, supervisors draw a Journey Plot of their perception about students' trajectory, their subjective experience or development as researchers. The main objective is to contrast different interpretations about students' trajectory and build shared meanings of the events lived.
- *Perception of their own experience as supervisors.* In this modality, supervisors reflect on their experience as supervisors of a certain doctoral student, emphasising their interpretation, challenges and learning, and the significant events lived by the supervisors. The objective is to contrast students' trajectory with supervisors', and the subjective experience of each of the actors in relation to the development of the doctoral thesis. This modality can be more appropriate for intermediate phases of the process.



Example of activities.

Next we present four activities related to different moments of the process of the doctoral studies and that can be seen as prototypical examples of activities in which the Journey Plot is used.

Activity 1

- Moment: Beginning of the doctorate
- Content: Students' trajectory
- Persons involved: Supervisor and student
- Focus of the supervisor: mediator

Description:

The doctoral student draws a Journey Plot about their trajectory up to the moment (previous studies and first steps into the doctorate, if appropriate) and about their expectations along the doctorate. The supervisor guides the reflection on the process, stressing the student's conceptions and representations about the research and their objectives and expectations about the doctorate. Both define objectives and some key dates (presentation of the thesis proposal, data collection, participation in conferences, etc.).

Activity 2.

- Moment: Intermediate phase
- Content: Students' development as a researcher
- Persons involved: Group of doctoral students
- Focus of the supervisor: ---

Description:

The students individually draw a Journey Plot about their development as researchers. Later on, they take turns to explain the graph to their peers, who ask questions to promote shared reflection about the experience and learning achieved during this period. They can also negotiate and share objectives for the following phases.



Activity 3.

- Moment: Intermediate phase
- Content: Evolution of the thesis
- Persons involved: Supervisor and doctoral student
- Focus of the supervisor: experience as supervisor

Description:

The doctoral students individually draw a Journey Plot about their thesis process, and the supervisor does the same about their experience as a supervisor of this particular student. Once the Journey Plots are finished, they share and compare the two graphs, emphasising those experiences in which the interpretation and emotional intensity are very different and in those events that appear in only one of the two graphs.

Activity 4.

- Moment: Final phase
- Content: Students' development as researcher
- Persons involved: Supervisor and doctoral student
- Focus of the supervisor: experience of the doctoral student

Description:

Supervisor and student draw a Journey Plot about the development of the doctoral student up to that moment and their future trajectory. They both share and compare the two graphs, emphasising those experiences in which the interpretation and emotional intensity are very different and in those events that appear in only one of the two graphs, and they reflect together about the next milestones and possibilities for the student's professional development.





Protocol of questions to guide reflection.

In the following, we present a protocol of questions that promote in-depth analysis of the different aspects of the graph. To use it, it is suggested that individuals adapt it in relation to the objectives of each specific situation and person.

To reflect on a single Journey Plot

... for each positive significant event

What happened here?

How did you feel then? How did these emotions evolve?

Who was involved in this event?

What caused this rise?

What did you learn from this experience?

(in the case of subsequent decrease) Why did it decrease after that?

(in the case of maintained positive moment) Why was this positive moment maintained over time? How did you achieve that?

... for each negative significant event

What happened here?

How did you feel then? How did these emotions evolve?

Who was involved in this event?

What caused this slope?

Could it have been anticipated, predicted or avoided?

What did you learn from this experience?

(in the case of subsequent increase) Why did it rise after that? What did you do to overcome this negative moment?

(in the case of maintained negative moment) Why was this negative moment maintained over time? What were the causes? Could you have done something different to overcome this negative moment earlier?

... for the general shape of the graph

Does this graph represent the evolution of the experience?

Has it really been that *stable / unstable / negative / positive / changing / etc.?*

How do you see the future?

To compare and reflect on two or more Journey Plots

... for each positive significant event shared in all the graphs

What happened here?

How did you (all) feel then? How did these emotions evolve?

What are the causes of this rise?

What did you (all) learn from this experience?

(in the case of subsequent decrease) Why did it decrease after that?

(in the case of maintained positive moment) Why was this positive moment maintained over time? How did you (all) achieve that?





... for each negative significant event shared in all the graphs

What happened here?

How did you (all) feel then? How did these emotions evolve?

Who was involved in this event?

What caused this slope? Could it have been anticipated, predicted or avoided?

What did you (all) learn from this experience?

(in the case of subsequent increase) Why did it rise after that? What did you (all) do to overcome this negative moment?

(in the case of maintained negative moment) Why was this negative moment maintained over time? What were the causes? Could you (all) have done something different to overcome this negative moment earlier?

... to compare trajectories

What similarities do you (all) identify in the general shape of the graph? Is there any section that is similar?

What differences do you (all) identify in the general shape of the graph? Is there any section that is significantly different?

(if yes) Why are there differences?

Which key events are shared among the graphs?

Does the same event have the same intensity in each graph?

(if no) Why are they different? Why did each of you experience it in a different way?

How do you see the future going?

References.

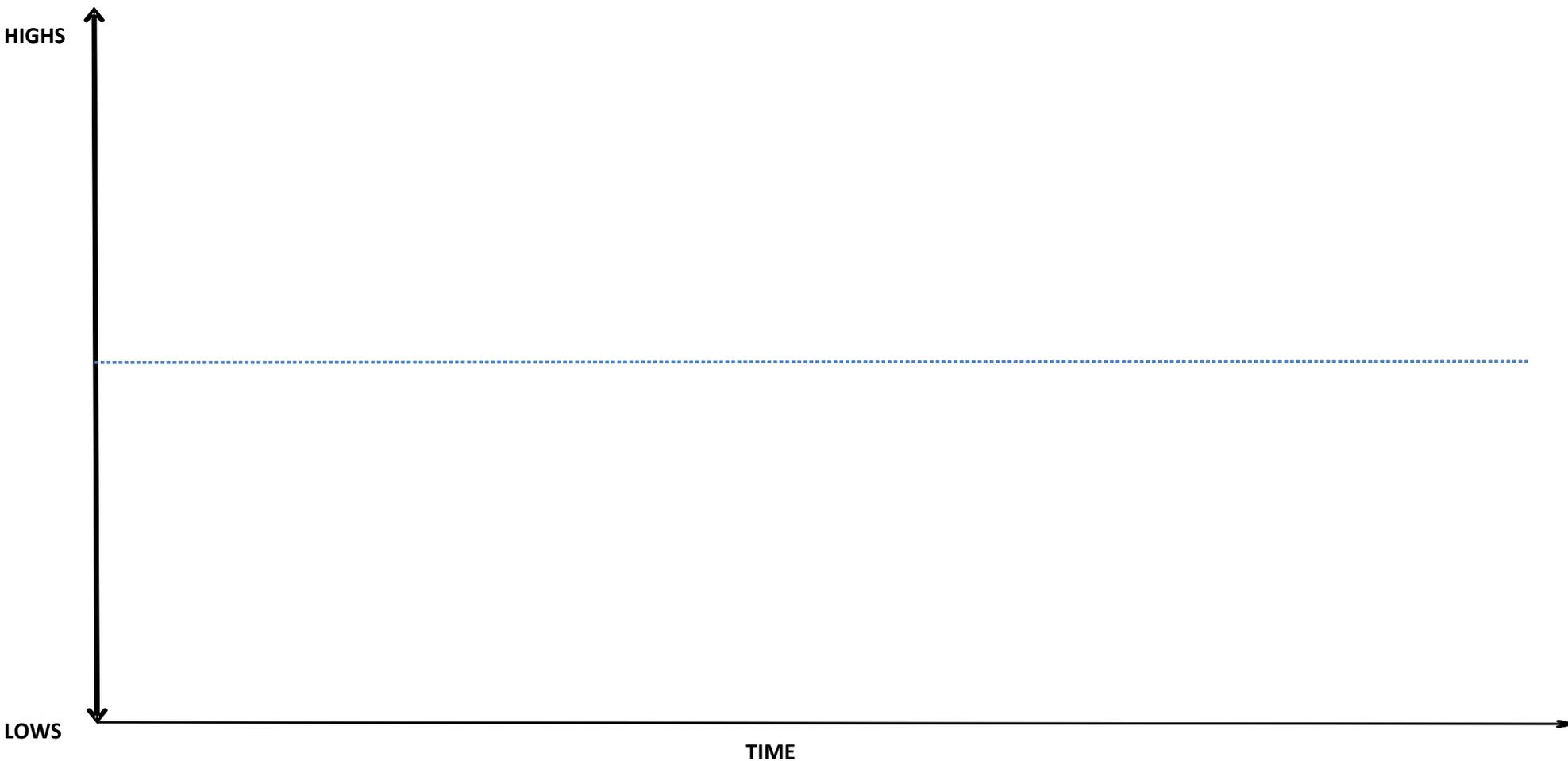
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RESEARCHER IDENTITY DEVELOPMENT (RID-SSISS)
ERASMUS+ PROJECT



On the diagram below please draw the highs and lows of your experience XXXX from XXX to XXXX. Please label the high and low points i.e. what they represent and the ascending and descending lines.





NETWORK PLOT – Graph of the research network

Background – justification.

The Network Plot (or Communities Plot) was initially created as a non-traditional visualisation method of collecting data about early career researchers' (ECR) research network and position in the research community. It is based on the notion of 'communities of practice', defined as groups of people who engage in shared social practices and collective learning (Lave & Wenger, 1991). Individuals can participate in many communities of practice in relation to one or multiple spheres of activity (Camps & Castelló, 2013; Engeström & Sannino, 2010), for example, by participating in two research teams or being member of different research associations. Moreover, this participation can take different forms. Lave and Wenger (1991) differentiate between full and legitimate peripheral participation (Lave & Wenger, 1991), as a way to emphasise the learning process of newcomers into a community. Others, however, have identified multiple and diverse forms of participation (Hopwood, 2010; Prior, 1995; Sala-Bubaré & Castelló, 2017), such as those of individuals who intentionally stay outside the community.

In research contexts, individuals' engagement, participation in and interaction with research groups, communities and other individuals is related to higher levels of well-being, learning research productivity and motivation (Gardner, 2010; Pyhältö, Vekkaila, & Keskinen, 2015) as they are important sources of support and can act as proxies for ECRs socialization in the research community (Lave & Wenger, 1991; McAlpine, Pyhältö, & Castelló, 2017).

The graphic representation of the network promotes individuals' recall and reflection about the experience, offers guide and structure to the narrative. Moreover, the multimodality of the representation (visual and oral) allows participants and interviewers or researchers to contrast the description of the network with its graphic representation (McAlpine, 2016), in order to compare, ask or provide more detail or clarify in situ misunderstandings and inconsistencies (Sala-Bubaré & Castelló, 2017). On the other hand, Network Plot is a useful tool to clarify, summarise and contrast certain aspects of the network that may remain inaccessible through language, such as the intersections among individuals and groups, and especially the general overview of the network and the position of the individual. Finally, in research or teamwork contexts, the graph facilitates quick and visual comparison of the network of two or more individuals.

Description of the instrument.

The Network Plot (originally named Communities Plot) is a simple graph created to capture individuals' network, that is, the individuals, groups and communities that they perceive as relevant in their research activity (Sala-Bubaré & Castelló, 2017). It is typically composed of a number of cercles of different sizes. They can be presented in a digital environment (e.g. Power Point) or as a hard copy (e.g. paper). The size of the cercles can be used as an indicator of importance perceived by the individual or the size of the group/community. Participants are given the cercles and are asked to represent their



research network by identifying the individuals, groups and communities that are relevant in their research activity and positioning themselves within this network. They are asked to use as many circles as they need: they can create more circles or delete or disregard some of the given circles, if needed, and name each circle they use. Participants reflect on their research network, the importance of each item and the position assigned to themselves. Moreover, they are invited to reflect on their ideal or desired network, the position, relationships and contacts they would like to have and not have. To this end, participants can create a new Network Plot graph.

Used as a pedagogical tool, the Network Plot is presented in the context of an interview, counselling session or training to promote awareness, reflection and sometimes discussion about individuals' relationships with and participation in different groups and communities and the affordances, potential limitations and effective strategies to improve their network in relation to individuals' professional goals. The ultimate objective is to extract useful learning for the person, for instance, to introduce changes in the selection and engagement in their participation in and relationship with individuals, groups and communities in order for them to achieve their professional goals. It is usually used along with a more or less structured protocol of questions that guide the reflection. Below we present a protocol sample (pages 3-4).

Use of the tool for researcher development

This instrument can be used at any moment of researchers' development. However, it can be more beneficial for researchers that have some experience and insights on the relevant communities in their research field. Moreover, it can also be a useful instrument for supervisors in planning and promoting supervisees' engagement and participation in the research community.

Thus, we suggest two main uses of the Network Plot related to two different aims:

- NP as a tool to reflect and improve one's own research network.
- NP as a tool for supervisors to reflect and promote supervisees socialisation and research network.

In both cases, the activity can be individual or in pairs (e.g. supervisor and supervisee) or groups (e.g. in a workshop for doctoral students). In collective activities, the emphasis will be on the shared reflection of the goals for researchers' development, the opportunities offered by the current network and the potential limitations, as well as the strategies and solutions that can be implemented to achieve the goals. Moreover, when used in a supervisor-supervisee meeting, in addition to the former aspects, the reflection should also focus on the negotiation of goals and strategies and on the collaboration between them to achieve the goals (e.g. what will be the role of the student in increasing her network? How will the supervisor support the student? Which are interesting option for a research stay? Which of the supervisor's contacts should be also part of the doctoral student's network?).



Protocol of questions to guide reflection.

In the following, we present a protocol of questions that promote in-depth analysis of the different aspects of the graph. To use it, it is suggested that individuals adapt it in relation to the objectives of each specific situation and person.

To reflect on the Network Plot - improve supervisees' and one's research network.

... for each cercle included in the NP

Why is this individual/group important for you?

Do you feel comfortable with your position in relation to this individual/group?

Why do you think you have this position (e.g. far away, periphery, center...) in relation to this individual/group?

Where would you like to be in relation to this individual/group? Why?

What should you do to achieve this position?

... to compare and reflect on the relationships among items

How are *these* cercles related?

Why do some/these cercles overlap?

Why are *these* groups/individuals more relevant than *these*?

... for the general shape of the graph

How do you feel about your research network? Are you satisfied with it? Why?

How would you like to be positioned in your network? Why?

... in relation to your career development goals

What are your goals in relation to your development as researcher?

What individuals and groups would you want to have access to?

How can your network help you achieve these goals? Who can help you win this access?

What would you need to do in order for this to happen?

For supervisors - to reflect on the formative use of their research network

... in relation to your current research network

(in addition to the former questions - see box above)

What kind of network do you have?

Does your network have formative potential for your students?

What role can you play in using this network as a formative tool?

How can your network benefit your student/s?

... in relation to your supervisees' networks and goals

What goals do/es your student/s have in relation to their development as researcher/s?

How would you like them to benefit from your network?

What is the students' current network? What individuals, groups and communities are/is your student/s currently engaged with?





How did they become involved with them?

... in relation to the development of your supervisees' networks

What individuals, groups and communities should they engage with?

What can the student/s do in order for this to happen?

What is your role in helping students improve their research network?

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INTERVIEW PROTOCOL CYCLE

RESEARCHER'S IDENTITY DEVELOPMENT

*When asking for the significant events, networks and other big words: Provide a homogeneous definition in case they don't understand and ask for clarification.

Purpose

The goals of the study are:

- To identify and analyse what significant events early researchers face in the different phases of their research.
- To identify and analyse how do they manage these significant events and what problem solving strategies they use when facing negative or problematic events.
- To deepen into the profiles identified in the first phase of the study (this is an objective for the second phase of interviews, not for the pilot study)

The goals of this interview

- To deepen on the understanding of significant events identified in the first phase of the study (answers to the questionnaire).
- To analyse how different type of significant events evolve over time (retrospectively; from the questionnaire answers to interview date)
- To analyse if any other significant events have appeared to interview date
- To understand the strategies that participants use to solve problems and difficulties
- To understand the relationship between significant events and community socialisation

After the first two pages that outline the complete sequence from pre- to post-interview, the protocol sets out the specific tasks and questions to be followed by the interviewer. Rationales are provided as appropriate in the column on the right.



TECHNICAL REQUIREMENTS
(check some days before the interview)

Participant:

- Having Skype installed (or Hangout).
- A Gmail account is needed to access the Drive documents.
 - If he/she doesn't have Gmail, he/she can use an account that we have created for the project (**tell the team** because two participants cannot access at the same time):
 - Username: proyectofins1@gmail.com
 - Password: proyectofins

Researcher:

- Having Skype installed.
- Having created the folder with our participant's Journey Plot and Network Plot documents and having shared with him/her (templates are in the Templates folder). Having edited the Journey Plot document, adding temporal divisions to the X axis (years of his doctoral/postdoctoral trajectory).
- Having the program to record the screen. **IMPORTANT:** Make sure you have enough space in your computer to later save the file.
- Having an audio recorder.
- Having fulfilled the participant's grid.



OVERALL SEQUENCE

1) Preparation for the interview

a) Medium term preparation

- Choosing interviewee based on profiles
- Contacting and getting participant agreement
- Prepare interview protocol

Look at 'biographic data' (age, discipline, stage and duration of the thesis, ...) and at the **significant events from the FINS questionnaire, feelings associated, attempted solutions**; as well as the results in the scales of supervision and community, their interest and engagement, their writing conceptions; publication experience, international mobility, work expectations, etc.

FILL THE INTERVIEWEE CHART AND PROTOCOL IN.

b) Short term preparation

- Review all the interviewee data again, verifying the equipment (Skype, on-line documents, two audio recorders, recording software) and give access to the on-line documents to the interviewee.
- Contact the participant to remind him/her the interview and confirm all is well with him/her.

2) Interview process

a) Part I: Set-up and briefing (about 5')

Reminding interviewee the purpose of the interview, confidentiality and consent

b) Part II: Initial general questions (about 10')

Explore the general reasons for enrolling in a PhD or in a research career and any changes in their current situation

c) Part III: Journey Plot instrument (about 15-20')

Explore how significant events are related to others, how they evolve and their intensity and emotional impact; and explore the specific actions or strategies students develop to face or cope with the negative significant events.

d) Part IV: Network Plot (about 15-20')

Explore early career researchers' network (number, type and relationships between the individuals and groups and participant), their position in the network and the linked emotions.

e) Part V: Closure (about 5-10')

Opportunity for the interviewee to add or expand on what has been discussed – often most fruitful part of interview in revealing things they are interested in.





Mid-term preparation

Name of interview: _____

Profile: _____

Interviewer: _____

Activity	Done?	Rationale
<p>Choosing interviewee (with team)</p> <p>Contact and see if willing to be interviewed</p> <p>If yes, arrange time and send consent form</p> <p>Upon receipt of consent, return copy to interviewee, including any info needed for the info, e.g., access to paint, etc</p> <p>Store consent form in secure location (hard and soft copies)</p>		<p>Check if person should be interviewed</p>
<p>Complete the interviewee grid:</p> <p>Remember we are interested in the significant events experienced by the participants and the variations across individuals, particularly in respect of the strategies and feelings related to these events as well as significant agents involved.</p> <p>For the general questions, look and select the interviewee answers on research conceptions items and also to engagement and interest scales.</p> <p>For the Journey Plot, select the <u>significant events</u> on the questionnaire, as well as other <u>problematic areas</u> in their experience (related to the different scales and other questions – abandonment intentions, (dis)satisfaction, etc.) and <u>successful experiences</u> (e.g. big number of publications, research mobility...).</p> <p>For the Network Plot, select the relevant information about <u>socialization</u> (supervision and community scale, research mobility, type of work –individual, teamwork, both-).</p>		<p>To gather more details on issues raised in the questionnaire</p>
<p>Schedule interview in a secluded place</p>		<p>Ensure privacy and quiet</p>
<p>Reconfirm interview time, location with participant</p>		



Book 2 digital recorders (if needed)		
Contact participant (one or two days before the interview) and send him the consent form		

Short-term preparation

Review all the interviewee data again, verifying the equipment (Skype, on-line documents, recording software) and give access to the on-line documents to the interviewee.

Activity	Done?	Rationale
Reviewing all the interviewee data again (see mid-term preparation): participant grid		
Verifying the equipment: <ul style="list-style-type: none"> - Checking Skype setting and proper functioning - Checking the on-line documents to be used (JP & CP) - Testing the recording devices (audio and video) and check the setting in case they do not record properly 		
Checking the room for the interview		
Read the protocol; add notes if pertinent		
Giving the interviewee access to the on-line documents and asking him/her to send back the fulfilled consent form (if not sent yet); suggest it might be helpful if they had their diary available for the interview.		*Note: this should be done at least 10 minutes before the interview
See part 0 for technical procedure		



Part 0: Previous to the interview (15' before starting)

INTERVIEW

- 1.1. Reread the participant grid and the interview protocol.
- 1.2. Start the video program.
 - 1.2.1. MAC: QuickTime.
 - 1.2.2. PC: CamStudio.
- 1.3. Open the two Drive files (Journey Plot and Network Plot) that we have previously shared with the participant. This way, when the participant access the files, we will see we are sharing the same document.
- 1.4. If you use Skype: Open Skype and add a new contact with the username of the participant. Check he/she is on-line.

If you use Hangout: click on the video camera of the chat and invite the participant with his/her e-mail address.
- 1.5. Start recording.
 - 1.5.1. MAC: maximize QuickTime and click 'rec'. Select area.

PC: CamStudio: Record.



Part I: Set-up and briefing (total time: about 5')

Activity	Done?
<p>Introducing oneself and reminding the interviewee the purpose of the interview:</p> <ul style="list-style-type: none"> ● My name is ... and I'm part of the research group XXX. As you know, we are conducting a research to identify what significant events early researchers face in the different phases of their research and how they relate to their trajectory. ● In this phase of the research, we want to better understand your experience. ● Thus, the goals of the interview are: <ul style="list-style-type: none"> ○ To know more about the characteristics and development of significant events identified in the questionnaire ○ To explore if any other events have appeared from then till now ○ We are also interested in the relationship between significant events and your participation in your research community. 	
<p>Ask interviewee not to mention third parties by name (e.g. supervisors, colleagues...)</p>	
<p>Seek permission to audio and video record</p>	
<p>Tell the interviewee that interview transcript will be sent to them and they should add/delete/clarify as they see fit</p>	
<p>Switch on the recorders</p>	
<p>Reminding interviewee the confidentiality of the data collected and the possibility to finish the interview at any moment.</p>	
<p>Collecting the consent form</p>	
<p>Ask if any questions before start</p>	



Part II: Initial general questions (total time: about 5 -10')

Question / theme / prompt	Notes
<p>1a. How is your situation, if at all, different from when you did the survey?</p> <p>1b. What is your current situation?</p>	<p>We look for changes from the questionnaire answer: funding, research development...</p>
<p>2. What does it mean in terms of your current activities?</p>	
<p>3. Do you remember why do you decided to start a PhD (or to develop a research career)?</p>	<p>Just to start conversation, one general reason can be considered enough</p>
<p>4. What does research means to you?</p> <p>After the participant answer: You considered research as (answer from the questionnaire to the research conceptions items)?(If several options were marked as high, more than 3, then ask: Would you prioritize and explain your answer?)Has it changed? (If yes) can you explain how and why?</p> <p>Could you please prioritize the items, telling us why you have chosen the order you have?</p>	<p>To deepen on understanding their conception about research and to know about possible changes</p> <p>*Then link it to the answers in the research conceptions scale!</p>



Part III: Journey Plot instrument (total time: about 15-20')

Instructions for participants:

Now I'd like to explore the significant events you lived during your doctoral/postdoctoral trajectory. Can you open the Journey Plot document?

Explain how the graphic and program work:

- We will use this tool to represent your doctoral/postdoctoral trajectory through the significant events. As you see (*click the Y axe so the participant sees it highlighted*), the Y axe represents the 'emotional LOW / HIGH of the experience' from positive to negative. (*Click the X axe*) In the X axe you have the time represented in months; we will focus in the last year of your trajectory, from last January till today (*click today*).
- Now I'd like you to draw in this graphic the most significant events during the last year. Have you ever used this program? It's similar to the Paint program. To draw you need to select the option 'Scribble'. If you click the 'line' icon on the top bar, click the arrow next to it, and select the last one. Can you try it and draw something to see if it works?
- Good. Now we can start.

Question / theme / prompt	Notes
<ul style="list-style-type: none"> - I'd like you to draw a line that represents your trajectory during this last year, with highs (positive significant events) and lows (negative significant events). (<i>Do a graphic so he/she can see it</i>). 	<p>*Ask the participant to explain the graphic while he/she draws.</p> <p>*Use the participant's grid to write those significant events that later will need to relate with the network plot.</p> <p>*OPTION: While the participant draws, add text boxes to summarize the event. This will allow us to check we are understanding the participant. We can also ask him/her to do it.</p>
For each significant event (<i>draw a circle on each</i>	Note them the intensity



<p><i>significant event so the participant sees the event we are talking about):</i></p> <ul style="list-style-type: none"> - Let's look at each of these events in more detail - In this case, what actually happened was (<i>repeat what the interviewee has said before</i>) - How long did it last? - How did you feel then? And now? How your feelings evolved? - Who was involved in this event? - Who helped you to overcome the situation? How did he/she/they help you? - - In looking across all the emotional lows, can you tell me anything about how you coped with these kinds of experiences? 	<p>of the events (e.g. is that event even more positive than this previous one?)</p> <p>Remember!</p> <p>Each significant event will have to be related to a certain individual or group in the 'Network Plot'</p>
<p>General questions:</p> <ul style="list-style-type: none"> - Looking at the shape of the graphic, how you would describe your overall experience/journey? (if necessary remind her/him some characteristics of the graphic: <i>many changes and variations/your graphic is very flat/you started in very high but your experience went down along the journey/...</i>) 	<p>General questions to make sense and have more information about the general picture of the graphic</p>
<p>Significant events in the questionnaire:</p> <ul style="list-style-type: none"> - In the questionnaire you explained that XXX was one of the most significant positive events and XXX one of the most negatives ones. Do they appear in this graphic? (<i>If not</i>) When did they happen? - Is there any relation between this one and the ones you experienced this past year? <p>Same questions than for the significant events (what, how long, feelings...)</p> <ul style="list-style-type: none"> - 	<p>Use the grid of the interviewee to collect the information that might be useful to prompt recall.</p>



Part IV: Network Plot (total time: about 15-20')

Instructions for participants:

This is the tool we will use to represent your research network in the scientific community, that is, the individuals and the groups you interact with.. Please represent your research network at this time. You have different circles of different sizes. I'd like you to use as many as you need to represent the individuals and groups that are important in your research experience/network and the connections between them. The size being the relevance they have in your experience. I'd like you to represent your perception of the connections between them and your position in the community. You can use as many as you need and move them (move one so he/she can see it) to organize your network. Please write the name of the individual or group on each circle. To write, click right button inside the circle, select 'add text' and write the label (do an example).

But first, I'd like you to indicate yourself on the network plot at this moment.

**Note: Ask the interviewee to explain the network and name the circles as they do it.*

**Note: Connections are represented with the position of each circle. For example, 'my research group' might be inside the 'international research network because it interacts with this group of people.*

Question / theme / prompt	Notes
<p>Possible prompt if the interviewee doesn't know how to start: In the questionnaire you mentioned you did a research stay, you work in a research team, you participated in different conferences....</p>	<p>Use the grid of the interviewee to collect the information that might be useful to prompt recall.</p>
<p>Why are this individual important for you? Do you feel comfortable with your position in relation to this individual/group? Why? Or why not? Are all of them equally important?</p>	<p>*note interviewee's position in relation to the other circles</p>
<p>Are those events you have mentioned in the Journey Plot related to some of these individuals and groups (looking at the network Plot)? Which are the relationships that were important for each event in relation to the individuals and groups in your network plot?</p>	<p>*note participants about the relationships between individuals/groups and the sizes they choose.</p>
<p>Where would you like to be this network constellation? What would it take for you to achieve this position?</p>	<p>Ask to the participant to draw another circle with his/her desired position</p>



Part V: Closure (total time: about 5')

Opportunity for the interviewee to add or expand on what has been discussed – often most fruitful part of interview in revealing things they are interested in

Question / theme / prompt	Notes
Do you want to add anything else?	

Regarding future training:

Based on the results of the project, we will design support material and resources aimed at offering novice researchers help and advice on **writing, networking...** We also want to design training courses.

When? Data collection will finish in February, so by the end of the academic year we will probably present the first proposals.

Last question:

What information and resources would you be interested in receiving?



SECTION TWO: RESOURCES FOR RESEARCH SUPERVISORS



GUIDE FOR THE ANALYSIS OF CRITICAL INCIDENTS

DESCRIPTION OF THE INCIDENT AND ITS BACKGROUND

- Background (context necessary to understand the incident):
 - Brief description of the characteristics and trajectories of individuals involved, and of the type of doctorate.
- Description of the incident:
 - When did the incident happen?
 - What happened?
 - What actors were involved in the incident?
 - How did they act?
 - Why was it 'critical' (feelings and perceptions about the incident)? What dilemmas and tensions did this incident cause?

ANALYSIS OF THE INCIDENT

- Background (context necessary to understand the incident):
- Description of the incident:
 - At which moment the incident happened (in relation to the calendar but also, for example, in relation to the student's trajectory, the development of a project, the relationship between supervisor and student ...)
 - What happened?
 - What actors were involved?
 - Why did they act as they did?
 - How would each of them interpret the incident?
 - How would they interpret its causes?
 - And its consequences?
 - Why was it 'critical'?
 - Could it have been avoided?
 - How do we manage the consequences of the event?
 - How can you prevent this happening in the future? // How can you solve it (in case it is an incident that persists at the moment)?
 - What is the objective in relation to the resolution of this incident? (not happening again, increasing the productivity of the meetings, etc.)
 - Are there any necessary 'environmental' conditions to be met? (e.g., more time, money ...)
 - Can we do something to meet these conditions?
 - What should each of the actors involved do?
 - What is our commitment in relation to this objective?



CASE ANALYSIS – CRITICAL INCIDENTS

CASE 1: Writing the doctoral thesis.

I have a student, Albert, who is at the last phase of the doctorate; he is three and a half years in. Lab work has been very hard but we have managed to have good results to publish. Now that his scholarship is ending, he is getting nervous: the results need to be written in chapters and in English. He has sent me a draft of the thesis with all the sections, introduction, materials and method, the results and a final discussion, which is a good start but still needs a lot of work. I have sent him my comments, some of which ask for a thorough revision of the text, especially in relation to the discussion. The student, however, does not intend to invest more time in it because he has to submit the thesis in two or three months. He hopes that I will correct the manuscript and finish it so he can submit it.

I do not know what to do ... It is true that in our department it is usual for the supervisors to end up writing a large part of the thesis. In addition, the student has certainly worked hard and obtained good results, and he has the pressure of the end of the scholarship, but I think the writing of the thesis is an important part of the doctorate and the competencies that researchers must have.

CASE 2: Rejection of an article.

A couple of months ago, one of my students, Maria, sent an article of her thesis to a good journal. They replied last week and the review was very negative. It was rejected and the tone and content of the comments are tough and complex to address. Yesterday we had a meeting to discuss the report and make decisions. I tried to encourage her, explain the publication process and that rejection is relatively frequent, but it is true that reviewers are rarely so harsh. I tried to make it clear to her that by revising some aspects of the paper, we can send it to another journal and we have many possibilities for it to be published, but she refuses to budge. She has spent a lot of time and efforts and the critics have discouraged her. She says she would prefer to focus on something else and leave this study for later. We agreed she will look at the article and the review report in relation to the possible changes we discussed and that next week we will talk about it again.

I am worried that she won't change her mind. It is true that the critiques are harsh and she would need to invest quite some time to review it before submitting it again, but I think that can be a good paper and putting it aside now can make it even more difficult to take it up in the future. I do not know how I will do it to make her see that it is best not to postpone the revision.



CASE 3: Asymmetric co-supervisory.

For a couple of years, I have co-supervised the thesis of a student, Marc, with the PI of my group. Normally, the student and I meet weekly to talk about the analysis and progress of the thesis, and once every two months the three of us meet and the student presents the last results. That is to say, I am in charge of the day-to-day supervision of the thesis. The problem is that for about six months now, his work is not moving forward. The student is blocked. What we discuss and agree on at meetings does not materialize in the analysis and he is getting increasingly de-motivated and negative. The last two meetings with the co-director have been tense since she also sees that the thesis is stuck and she asked us for an explanation. Also, I met with her at a meeting and she told me she is very unhappy with this student and I felt she was questioning my work as a co-supervisor.

I do not know how to unblock this situation. The responsibility that the student advances is mine but I have little experience and I have never had to deal with a case like this before. I know that some of my colleagues sometimes choose to do the analysis or write the articles themselves... I really want the thesis to progress and, above all, I want to publish; it would help me get a tenure-track position.

CASE 4: Student with personal problems.

Joaquim is one of my PhD students. He is in his fourth year and has a scholarship that ends in six months. From the beginning, things have gone very well; he is really good and hardworking, and he advanced at a good pace, but a couple of months ago he began to have personal problems, the illness of a close relative. At first, obviously, you do not even think about it: 'Don't worry, take the time you need; now you have to take care of the family'. But this relative is not fully recovered yet, and Joaquim has not worked in the thesis for the last two months and in a few months he will be left without a salary. Once I tried to talk him but I did not succeed. He was too overwhelmed and I did not want to insist.

I understand that family comes first, but I worry that he will abandon if the scholarship ends and he sees the end of the thesis is still far away. I do not want to pressure him; he must be worried enough already! But it would be a real shame not to finish this thesis; it is very good and so far we have been obtaining very interesting results. In addition, Joaquim is very competent and I think that he has good chances to continue in research, if he wants. I will have to try to talk to him again ... but I do not know how to approach the conversation.



CASE 5: Student assigned by the university.

In September, the doctoral school contacted me. It turns out that they have a person, Gustavo, from Uruguay, who has enrolled in the doctorate of Pedagogy to do the thesis on a subject very similar to my research topic. And they tell me that they have assigned me this student and I will have to supervise the thesis. Of course, I got a bit angry at the beginning; I do not know about this person, but apparently there is nothing I can do about it. So, we met to get to know each other and start talking about their thesis, but from the beginning it is not going well... He has a very fixed idea of what he wants to do, and I do not find it very interesting and, above all, I don't find it original, but there is no way to change his mind. We have discussed it several times and nothing has changed.

I think I'll tell him that he has to look for another supervisor. I have a lot of work and especially now that they have forced me to take the coordination of the new course. Plus I do not feel like discussing with him anymore; It's like talking to a wall! If he just listened to me, it could be an interesting thesis and I think that he could do a good job, but the truth is that I have run out of patience.

CASE 6: Co-authorship.

Nora, one of my PhD students, is finishing the first article of her thesis. It is a very interesting study. We designed it with great care and the truth is that we obtained very interesting and innovative results. The analysis of the data has been very complex, and I have had to invest a lot of time too. I usually only guide and mentor my students, but in this case, the project was ambitious and I invested many hours on it. Plus, Nora has had difficulty writing the article, and I had to rewrite some parts, especially the discussion because they were poorly written. Now, finally, it seems it is almost finished and I think the paper has good chances to be accepted in a very good journal.

The last few days I've been thinking that I should tell her to add me as a co-author. In our discipline, this is unusual and doctoral theses are the intellectual property of the student exclusively, but I have spent many hours not only to guide her but also to 'work', run the analysis, write the article, etc. And I know she could not have done the job without me; I feel I am an author of this paper too! But I think it might not very ethical to publish with her as it is an article of her thesis..



INITIAL QUESTIONNAIRE – EXPERT SUPERVISORS

Name:

A. Experience as a supervisor

1. Think back on your supervisory experience and tell me about a particularly positive event you have had as a PhD supervisor. What made it a positive experience?

2. Think about your supervisory experience. What is an issue or problem that you continue to think or worry about, something that you haven't yet resolved or got right?

B. Experience of co-supervision

1. Please describe a particularly positive experience you have had as a PhD co-supervisor.

2. Please describe an unproductive experience you have had as a PhD co-supervisor.

C. Situating your supervision within institutional practices and policies

1. Name one or two things in your department or program that help you be a) a supervisor, and b) a co-supervisor.

2. Name one or two things in your department or program that make it difficult to be a) a supervisor and b) a co-supervisor.

D. Personal goals for the workshop

1. Please describe at least one goal you would like to achieve by participating in the workshop.



GUIDE FOR EXPERT SUPERVISOR TO REFLECT ON THEIR PRACTICE AND EXPERIENCES

How might the research on supervision influence our practice?
Things I'm more intentional about now

Day 1: Personal practice

SUPERVISION WITHIN ACADEMIC WORK

- What have you experienced as the synergies?
- What have you experienced as the challenges?

YOUR EXPERIENCE OF BEING SUPERVISED

Think back to your experience of being supervised as a PhD student. On the diagram below:

- Draw a line that captures the highs and lows of the experience.
- Note what experience is represented for each high and low point.

NB The *horizontal* axis represents time from start to finish of the degree; the *vertical* axis represents emotional highs and lows.





WHAT WORKED FOR YOU?

Using your journey plot about being supervised, answer these questions.

1. What things did your supervisor do that you
 - Planned to do with your future students? *Why?*
 - Wanted to avoid? *Why?*
2. Did these strategies work consistently?

SUPERVISION AND ACADEMIC WORK

1. What in your view is the purpose of supervision? (see p. 6 for overview of all principles)
2. How do you think the purpose influences your supervisory practice?
3. Who else knows your view on the purpose of supervision?

WHAT CONTEXTUAL KNOWLEDGE DO YOU DRAW ON WHEN SUPERVISING?

Formal policies: On paper regulations, procedures (FP)

De facto policies (DF): Taken-for-granted practices; may be independent of FP or variants (perhaps inconsistent) of FP

1. *Changing supervisors: How does it work?*

David: Leading up to the switch the process was so opaque that I felt trauma – this is the most horrible thing that I could possibly decide to do and I'm so nervous about the retribution ...after doing this. And nobody had told me what a normal process it is, right. So if I had known that it was normal then I would have probably switched a lot sooner and saved myself maybe a year.

- What might have contributed to David's experience?
- What is the departmental/institutional policy on supervisory change?
- What do you tell your students about supervisory change?



NB While from 20-25% of students appear to experience a change in supervisors, students report feeling exceptional, isolated; not surprisingly, such changes slow progress.

2. List in the appropriate column in the table below the institutional/departmental formal policies (FP), and de facto 'policies' (DF) you draw on when supervising. These may be particular to supervision or more general.

Institutional policies	De facto 'policies'

3. In what areas, if any, is there invisibility or inconsistency between FP and DF?

SELECT STUDENTS CAREFULLY

1. What strategies, if any, do you use to select students? Any relevant policies?

NB Things to consider:

- Expertise in area (Donald et al. 1995)
- Time available (Barnes & Austin 2009)
- Student involvement (Barnes 2012)

EXPECTATIONS OF THE SUPERVISORY RELATIONSHIP

Students will vary in their expectations and will also compare notes with other students. Each of us has expectations about the supervisory relationship but we may not have made them explicit even to ourselves.



Go to 'Expectations in supervision' and complete the questionnaire. Then, compare notes with the person next to you.

Expectations are often implicit and differ between individuals (Woodhouse 2002). Clarity as to expectations enhances satisfaction and progress (Ives & Rowley 2005).

NB Remember to review expectations from time to time as the student gains independence.

CONCRETE CONSTRUCTIVE FEEDBACK

There are many aspects to consider regarding feedback:

- Present work
- Progress
- Frequency
- Quality/ nature
- Adjustments over time due to changing tasks and growing independence

GOAL: for students to internalize the critique process

AVAILABILITY

Availability enhances satisfaction (Zhao, Golde & McCormick 2007); lack of availability (unexpected unavailability) disrupts progress.

READING AND WRITING → THINKING

1. What strategies, if any, do you use with students to develop their reading abilities?
2. What strategies, if any, do you use to develop students' writing abilities?

The thesis as monograph

- In what ways is a monograph thesis similar to and different from an article-based thesis?
- Read and discuss the table on p.8, paying attention to where and how students can demonstrate their argument.

Student challenges



- Creating a narrow-enough focus for the study: topic/question and worthy conceptual framework
- Structuring an argument over a large piece of work (thesis) with consistency and balance
- Being analytical and critical of their own thinking/writing
 - ➔ Need to 'teach' reading and writing (come back to this tomorrow)

Some writing resources

- <https://owl.english.purdue.edu/owl/resource/679/01/>
- [Writing Across Boundaries](#)
- For scholars using English as an additional language:
 - <http://www.ease.org.uk/publications/author-guidelines>
 - <http://www.authoraid.info/resource-library>; also has useful general info, e.g., on grant proposals
- Mostly undergrad but nice use of annotated assignments and lecturer comments:
 - <http://www.monash.edu.au/lis/lionline/writing/index.xml>
- Lillis, T., & Curry, MJ. (2010). *Academic writing in a global context: The politics and practices of publishing in English*. London, UK: Routledge.

SOME NON-ACADEMIC CAREER WEBSITES

- <http://versatilephd.com/>
- http://www.prospects.ac.uk/your_phd_what_next_non_academic_jobs.htm
- <http://chronicle.com/article/Transferring-Your-Skills-to-a/46430> (examples of PhD skills in non-academic settings)
- <http://www.columbia.edu/cu/tat/pdfs/academic%20administration.pdf> (Exploring the potential of university administrative positions that often call for a PHD)

SOME ETHICS RESOURCES

- <http://ethics.iit.edu/eelibrary/case-study-collection>
- <http://ethics.iit.edu/projects/case-studies> (Annotated set of references about case studies in teaching)

THE FUTURE: PERSONAL INSIGHTS AND GOALS

1. Please list the key ideas that have emerged for you today.
2. Develop 3 concrete goals that you can work towards to enhance your practice of supervision. Set yourself some deadlines.



RESEARCHER IDENTITY DEVELOPMENT (RID-SSISS)
ERASMUS+ PROJECT





**SUMMARY: PRINCIPLES DRAWN FROM WHAT
THE DOCTORAL RESEARCH TELLS US**

1. Clarify your view of the purpose of supervision.
2. Understand university policies and departmental practices.
3. Select students carefully.
4. Clarify expectations.
5. Provide concrete constructive timely feedback.
6. Make availability clear.
7. Provide instruction/guidance on reading.
8. Provide instruction/guidance on writing.
9. Be attentive to career intentions and direct students to resources.
10. Provide instruction/guidance on ethical practices.
11. Seek to learn what students may not tell you.
12. Remember supervision is about 'us' not just 'me'!





EXPECTATIONS IN SUPERVISION

Read each of the statements below and then estimate your position in each. For example with statement 1, if you believe very strongly that it is the supervisor's responsibility to select a good topic you should put a circle round '1'. If you think that both the supervisor and researcher should be equally involved you put a circle round '3' and if you think it is definitely the researcher's responsibility to select a topic, put a circle round '5'.

- | | | | | | | | |
|-----|---|---|---|---|---|---|---|
| 1. | It is the supervisor's responsibility to select a research topic. | 1 | 2 | 3 | 4 | 5 | The researcher is responsible for selecting his/her own topic. |
| 2. | It is the supervisor who decides which theoretical framework or methodology is most appropriate. | 1 | 2 | 3 | 4 | 5 | The researcher should decide which theoretical framework or methodology s/he wishes to use. |
| 3. | The supervisor should develop an appropriate programme and timetable of research and study for the researcher. | 1 | 2 | 3 | 4 | 5 | The supervisor should leave the development of the programme of study to the researcher. |
| 4. | The supervisor is responsible for ensuring that the researcher is introduced to the appropriate services and facilities of the department and university. | 1 | 2 | 3 | 4 | 5 | It is the researcher's responsibility to ensure that s/he has located and accessed all the relevant services and facilities for research. |
| 5. | A warm friendly relationship between supervisor and researcher is important for a successful doctorate. | | | | | | A warm friendly relationship is inadvisable because it may obstruct objectivity for both researcher and supervisor during the doctorate. |
| 6. | The supervisor should insist on regular meetings with the researcher. | 1 | 2 | 3 | 4 | 5 | The researcher should decide when s/he wants to meet with the supervisor. |
| 7. | The supervisor should check regularly that the researcher is working consistently and is on task. | 1 | 2 | 3 | 4 | 5 | The researcher should work independently and not have to account for how and where time is spent. |
| 8. | The supervisor is responsible for providing emotional support and encouragement to the researcher. | 1 | 2 | 3 | 4 | 5 | Personal counselling and support are not the responsibility of the supervisor – researchers should look elsewhere. |
| 9. | The supervisor should insist on seeing all drafts of work to ensure that the researcher is on the right track. | 1 | 2 | 3 | 4 | 5 | A researcher should submit drafts of work only when s/he wants feedback from the supervisor. |
| 10. | The supervisor should assist in the writing of the thesis if necessary. | 1 | 2 | 3 | 4 | 5 | The writing of the thesis should only ever be the researcher's own work. |
| 11. | The supervisor is responsible for decisions regarding the standard of the thesis. | | | | | | The researcher is responsible for decisions regarding the standard of the thesis. |



Dissertation genre: traditional monograph approach may bury the student’s voice

Kamler & Thomson (2006) analyzed the traditional form of the dissertation/thesis, the monograph. They found that the genre was structured in a way that interspersed an over-emphasis on factual accounts with argument. Further, the middle of the thesis was practically devoid of argument. See table.

<i>Traditional thesis segment</i>	<i>Narrative: move</i>	<i>Genre</i>
Introduction	Here is my experience. Here is what I am going to do and why.	Factual account Factual account <i>plus argument</i>
Literature review	This is what other people have said about the topic. Here is how my research fits in.	Summary Analysis (possibly) <i>Argument (some)</i>
Methodology	Here is what other people have said about methodology. Here is what I did.	Summary Factual recount
Findings	Here is what I’ve found.	Factual recount and summary (Possibly small pieces of argument)
Discussion	Here is what this means and why it is important.	<i>Argument</i>
Conclusions	Here is what I did, what I found and some things that might happen next	Summary <i>Argument</i>

(adapted from Kamler and Thomson, 2006)

Of course, this structure makes it hard for the reader to follow the overall argument. The conclusion we draw is that the writer has to make additional efforts to scaffold the argument for the reader in the middle of the thesis, e.g., incorporating explicit reminders of the argument that was developed at the beginning and will be returned to at the end.

RESEARCHER IDENTITY DEVELOPMENT (RID-SSISS)
ERASMUS+ PROJECT





Day 2: Collective practice

Imagine speaking to your department head, colleagues, and more experienced doctoral students: To what extent would they answer questions such as these in a consistent fashion?

- How often should students expect to meet with their supervisors?
- What is the process for changing supervisors?
- How many students should a supervisor have?
- What student funding opportunities are there? Is the application process equitable?

Supervision Policies and Procedures

Yesterday we talked about university/ faculty/ departmental Policies (FP) and ‘policies’ (DF) that you draw on in your supervision. A third category is the extent to which FP policies represent the ‘spirit,’ the intended purpose of the policy.

Below is a list of some policy possibilities that build on research evidence.

- Review the list noting in the appropriate column the ‘state of play’ at Ramon Llull.
- Then, read through the list again prioritizing from 1 to 5 what for you are the most immediate areas for action.

Possible policies drawing on research evidence	FP with ‘spirit’	FP, no ‘spirit’	DF with ‘spirit’	DF, no spirit	None	Priorities (1-5)
Student selection & assignment process						
Clear funding criteria, including scholarships, that encourage integration						
Supervisory arrangements: co-supervision, team						
Assign (qualify for) supervision: Expertise, number of students, requirements, training						
Clarify responsibilities (expectations) of student, supervisor, program directors, etc.						

RESEARCHER IDENTITY DEVELOPMENT (RID-SSISS)
ERASMUS+ PROJECT



Clear ethical guidelines, e.g., joint authorship; intellectual property rights policy						
Explicit progress timelines with formal tracking mechanism, e.g., 6 month/ yearly progress reports						
Internal examiners (not supervisors) for formal assessment in first 12-18 mths						
Clear dept. practices/policies re number of meetings/term, changing supervisors, etc.						
Clear criteria for assessing PhD by publication, distinct from PhD by monograph						
Review & champion institutional student support, e.g., counselling, career & financial services						
Collect data on graduates so the department/ program can show range of career paths						
Provide opportunities for faculty positive social engagement re supervision, e.g., termly lunch						
Hold career activities, e.g., panel of graduates, possibly an online mentoring program						
Pedagogical support to address common student problems re writing, reading, topic focus						





PLANNING FORWARD TOGETHER

1. Collectively, generate key 'take-away' ideas.
2. Agree on three policy/practice changes you want to implement. Generate a strategy for each. Use the following template to help you.

Policy initiative	#1	#2	#3
Goal			
Action items with time line			
Who to involve			
Other			



SUPERVISORY ARRANGEMENTS

- What kinds of supervisory arrangements can you imagine/have you experienced?
- Regulations ... expectations
 - Single supervisor
 - Supervisor with committee
 - Team
 - *Co-supervisors (joint or 1st and 2nd)*
 - Within department, faculty, institution?

Additional principle: Learn your co-supervisor's perspective; clarify supervision purposes, expectations, meeting format etc.

Some models of supervision

- U1: Main & 2nd supervisor, unless interdisciplinary or methodologies from different field; then joint supervision
- U2: Principal supervisor, advisor (related field to discuss progress as agreed by student & supervisor *but not* regular formal supervision or pastoral support)
- U3: Main supervisor, co-supervisor (clinical, industrial partner), advisor (pastoral support, may be part of team); can form a team: balance of responsibility for day-to-day supervision should be negotiated
- U4: Supervisory team of at least 2 supervisors; one must be in area of student's research; can appoint joint supervisors (e.g., when both academics are researching jointly, when different fields, when student in another institution) or a lead & 2nd supervisor

Purpose(s) of co-supervision

- Better support student (absence not so critical) → student
- Recognizing and solving 'problems' more productive → student
- Provide insight into different approaches to supervision → supervisory exchange
- Learn how to supervise → new supervisor

Co-supervision meeting formats

- Individually with student → student must do the co-supervision
- All members every time → all 'on board'
- Mix of both → when requested or on a regular schedules



Internal-external supervisors: How does it work?

	University supervisor	External supervisor
Common tasks; co-operate (in addition to education/training)	<ul style="list-style-type: none"> - See student as a new member of own community - Show an interest in student's work - Recognize double acculturation ... and perhaps heavy workload? - Deal with illness, lack of motivation, hostility - Ensure progress, agree progress reports - Discuss results of research work - Manage finances - <i>Planning</i> 	
Distinct responsibilities	<ul style="list-style-type: none"> - Initiate and formulate contract (know academic qualifications required) → increases trust and clarity about objectives and mitigating risk 	<ul style="list-style-type: none"> - Ensure project scope fits external institution (final say if it will work but accept priority of academic knowledge) - Can be difficult to co-ordinate legal/contractual aspects of studentship involving 3 parties
Institutional role		<ul style="list-style-type: none"> - Ensure supervisor's workload includes time for students - Confidentiality & IPR: if tension, avoid by focusing on fundamental research



CO-SUPERVISION: HOW MIGHT IT WORK?

Read over these two examples and discuss the questions below.

Student perspective

Mary: I've got two supervisors, and they both come from quite different backgrounds, and it's been really good all the way through in that you've had this sort of argument going on, but I've got to the point now where ... sometimes I think their interests...it's almost now getting in the way, so much so that one of them at one point said, "Well, maybe I should step down and someone else should come in." I thought, well, I don't really want that to happen because obviously that person knows a lot of what I'm doing ... Yeah, that's caused some stress recently. ...and I don't want this intellectual argument ...It's an interesting argument, but ...it's not helping me with the PhD! So that, occasionally, has caused a bit of stress, just because I feel that I'm getting mixed messages.

Co-supervisor perspective

As a co-supervisor earlier on, a significant experience I had was the failure of the two supervisors to make time to meet early enough to focus on the student's work; failure of the two to agree on issues regarding the study; tendency of a supervisor trying to own the student's study; tendency for us to talk about our names on the map and forget the student in the process. I saw my position as a significant opportunity *to learn and grow in research*.

- How do you interpret these two situations?
- What strategies can you imagine to avoid these situations?

NB Students value co-supervision and it provides protection for the student if one supervisor leaves or is absent. However, students can find it confusing, particularly initially, if their supervisors have different expectations about student and supervisor responsibilities and the nature and quality of the work that is expected. So, time spent on clarifying expectations is important.



SECTION THREE: RESOURCES FOR POLICY MAKERS



TEMPLATE TO PLAN A WORKSHOP FOR ECR

Facilitator guidance notes: INSERT NAME OF WORKSHOP

Workshop: INSERT PILOT #

- Title:
- Length:
- Date:
- Location.
- Participants (NUMBER REGISTERED, NUMBER ATTENDED):
- Room/space organization (DESKS IN GROUPS OF XX INDIVIDUALS):

Workshop description

Goals

- INSERT EACH GOAL

Contents

- INSERT content

Teaching methodology

- Brief description of activities and instruments to promote reflection
- References

Materials needed (including reflective tools)

-

Data to be collected (e.g. pre and post-workshop forms, audio recording, participants' productions during the workshop...)

- INSERT ITEM BY ITEM
- XX

Pre-workshop form

Personal information:

- Number received:
- Gender:
- Age:
 - 30-34:





- 35-39:
 - 40-44:
 - over 45:
- Last degree earned: PhD:
- Average number of years since PhD completion:
- Departments: (1 missing value)
 - XX
 - XX
- Role:
 - Lecturer:
 - Research associate:
 - Post-PhD researcher:
 - Teaching associate:

Previous experience, expectations and goals (ADAPT TO EACH TOPIC / WORKSHOP):

- Concerns/challenges:
 - E.g. Describe one incident you have faced (or are afraid you might) in relation to your work as a doctoral supervisor.
 - E.g. What do you think is the worst or least interesting thing about supervising doctoral students?
- Expectations:
 - E.g. Why did you sign up for this workshop?
 - E.g. List three goals you have in relation to this workshop.
- Changing concepts/beliefs:
 - E.g. How would you describe the perfect doctoral student?
- Changing practices:
 - E.g. How often do you meet your doctoral students?
 - E.g. What determines the frequency of meetings with your students?

Post-workshop form

- Solutions and strategies regarding prior challenges:
 - What three ideas do you take away from the workshop?
- Changing concepts/beliefs:
 - Describe one thing you think differently after the workshop?
- Changing practices:
 - Are you planning to change something about your practices as a result of your participation in this workshop? If so, could you describe what and how would you change? (e.g. frequency of supervision)
- Expectations:



- Would you recommend this workshop to other colleagues?

Suggested workshop procedures

These procedures are based on reflection on the first pilot so incorporate additional items to what actually occurred.

Time	Activity	Notes/ comments
Xx months before	...	
Xx months before	Send pre-workshop form to participants	
	Send consent form to participants	
Immediately pre-workshop	Read participants' answers	
	Check reception of consent forms.	
Immediately pre-workshop	...	
During the workshop	Collect data (e.g. audio recordings, etc.)	
	Collect post-workshop forms?	
After the workshop	Send post-workshop forms to participants	
After the workshop	...	





TEMPLATE OF A DIDACTIC SEQUENCE OF A WORKSHOP FOR ECR

Title of the workshop

Objectives, contents and activities				
Before the first session				
Theme / objectives	Contents	Activities	Responsibility	Duration (aprox.)
<p>To active prior knowledge</p> <p>To explore participants' baseline, training needs and expectations about the workshop.</p>	<ul style="list-style-type: none"> • Prior experience about doctoral supervision • Conceptions, strategies and emotions related to the doctoral supervision process • Prototypical incidents and challenges related to doctoral supervision 	Answer the initial questionnaire	Participants (On-line)	30 minutes
...				
First day (XX hours)				
Theme / objectives	Contents	Activities	Responsibility	Duration (aprox.)

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Justification of the workshop	<p>Why a workshop addressed to supervisors:</p> <ul style="list-style-type: none"> • National vs. International context • Doctoral supervision research • <i>Innovative doctoral education</i> and modern doctorates 	Dialogued presentation	Facilitators	10 minutes
...				
Second day (XX hours)				
Theme / objectives	Contents	Activities	Responsibility	Duration (aprox.)
Most frequent incidents and difficulties	<p>Prototypical and emergent incidents</p> <ul style="list-style-type: none"> • Research • Doctoral students' perceptions: Redes-id www.redes-id.com/cuestionario • Supervisors' perceptions: initial questionnaire 	Dialogued presentations	Facilitators & participants	15 minutes

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	Critic-edu: video-cases www.critic-edu.com	Viewing and analysis of videos	Facilitators & participants	15 minutes
...				

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