Grant Proposals

Sequence, 4 sessions, 1 week

In teams, students collaborate to produce a research proposal and grant application for review by an expert panel. The proposal should be based on the requirements of an actual funding stream, appropriate for an early career researcher.

Through this integrated series of sessions, students experience the process of preparing a research proposal for a personal award or small grant, from the first germ of an idea through to having a proposal ready for submission. They learn in practice how to develop a line of argument for post-doctoral research, explaining:

- Why the research is important.
- What gap in knowledge the research question addresses.
- Why the chosen methods are appropriate.
- What ethical issues are involved and how they will address them.
- What resources they are requesting their grant budget and why they are justified.
- How to receive feedback and the evaluation of a proposal.

Grant Writing is a critical component of CARTA's PhD training program, as participants must put into practice all the knowledge, skills, and topic expertise they have gained along the learning journey as a PhD candidate. It contributes to essential competencies including critical thinking, research leadership, and research management.

Watch this video to prepare for the session:



One or more interactive elements has been excluded from this version of the text. You can view them online here: $\frac{\text{https://pressbooks.pub/cartacurricula/?p=2391\#oembed-1}}{\text{https://pressbooks.pub/cartacurricula/?p=2391\#oembed-1}}$

Download the curriculum for this sequence.

Sessions

Timetable

Use or adapt this timetable to hold these integrated sessions over one week.

Monday	Tuesday	Wednesday	Thursday	Friday
Teams develop proposals	Teams develop proposals	Teams develop proposals	Budget research proposals (Session 3)	
Team dynamics (Session 2)	Teams develop proposals.			Feedback and evaluation (Session 4)

Session 1. Research Proposal | 12 hours

Students work in multidisciplinary teams to develop a fundable project.

Provide a fictitious or mock call for proposals – or use or adapt an actual one – to serve as the basis for interactive group work. Small groups compete with each other to develop the most promising proposal, from the germ of an idea through to a proposal ready for submission. Much of the time, groups work on their own or ask you or co-facilitators for guidance.

Outcomes

By the end of the session, students can:

- Distinguish between the different phases of a project life cycle.
- Use planning tools to design a project.
- Develop a project proposal based on scientific evidence.

Preparation

- Identify and adapt a funding call for the students to respond to or create a mock call.
- Identify and engage co-facilitators to provide guidance over the course of the week. They must understand the process of grant-writing and the structure of the session so that they can offer guidance.
- Organise external reviewer/s to assess the proposals, provide constructive feedback to each group, and select the winning proposal.
- Arrange a prize for the winning team. (In the video, CARTA provided the winners with iPads.)
- Organise physical or virtual meeting spaces for team work.
- Divide students into multidisciplinary teams.
- Prepare introductory presentations and planning tools.

Assessment

Reviewers rate the proposals and provide feedback.

Steps

Introduce concepts and examples of proposal development, the project cycle, and the log frame, and share templates. Introduce concepts and examples of planning tools and share templates.

Allocate protected periods of time for teamwork.

Announce and celebrate the winning team once you receive the reviewers' decision and feedback.

Session 2. Team Dynamics | 6 hours

Introduce students to the factors and tasks that make for an effective team.

- At the macro level, they must consider how to set goals and procedures, make decisions, and distribute roles.
- At the meso level, they must understand how to ensure mutual cooperation and collaboration, and how to handle difficult situations.

Working groups and teams are dynamic constellations that go through different phases in order to work together as effectively as possible. "The whole is greater than the sum of its parts." This principle describes collaboration in unison, when individuals work together in a cooperative effort and together reach something much better than individuals could achieve separately.

Outcomes

By the end of these steps, students can:

- Identify their personal strengths, available resources, and experience in groups and teams.
- Analyse and integrate their own (work) culture into the work of their proposal teams.
- Identify group dynamic processes and success factors for beneficial teamwork.
- Evaluate the relevance of effective teamwork and possible challenges of working in teams.

Preparation

Find or prepare presentations on:

- Effective teamwork.
- Conflict management.
- Theoretical frameworks of human behaviour, in relation to teamwork.
- Group dynamics (dealing with feedback, cultural differences, resistance).

Create or source and distribute worksheets on individual strengths.

Assessment

Team-management presentations

Steps

Time Step		Who	
As needed	1. Identify strengths and experience	Pairs	
As needed	2. Reflect on working culture/s	Facilitator, individuals, small groups	
As needed	3. Discuss group dynamics	Plenary	
As needed	4. Develop a code of conduct	Groups, plenary	

Step 1: Identify strengths and experience

As needed

Introduce the topic of effective teamwork to the full group. Note that:

Working groups and teams are dynamic constellations that go through different phases in order to work together as effectively as possible. Success of teams depends on various factors such as: proper leadership, how goals and procedures are set, decision-making, role distribution, and attitudes towards cooperation, and collaboration

In pairs in break-out rooms, students identify their personal strengths, available resources, and previous experience in groups and teams.

Pairs report back in plenary.

Step 2: Reflect on working culture/s

As needed

Introduce the topics of conflict management and theoretical frameworks of human behaviour in teamwork. Students reflect on, and assess team dynamics and effectiveness, in their own workplace. They share these points in groups of four. Around their group table, each student introduces the strengths of their neighbour.

Step 3: Discuss group dynamics

As needed

Introduce the building blocks of effective team management, communication and feedback techniques, diversity, and dimensions of cultural differences, and dealing with resistance. Discuss challenges and success factors – including working as a virtual team.

Step 4: Develop a code of conduct

As needed

In their project groups, students develop a team code of conduct on a flipchart or PowerPoint. The code sums up the way the team proposes to work together effectively and deal with any conflict. A team spokesperson presents the code of conduct for each group in the plenary.

Session 3. Budget a Research Proposal | 4 hours

This session equips students with the skills and knowledge to develop the budget for a grant proposal and deal with budgeting issues.

Outcomes

By the end of the session, students can:

- Identify the resources needed for a research study.
- Estimate costs of identified resources.

Preparation

As facilitator

Source budget template/s, video/s and PowerPoints on this topic.

Students

Read the budget requirements for the mock call for proposals.

List any queries or questions for discussion.

Assessment

Included in the feedback (Session 4).

Steps

Time	Step	Who
As needed	1. Introduce the budget	Facilitator
As needed	2. Identify the necessary resources	Groups
As needed	3. Fill the budget template	Groups

Step 1. Introduce the budget

As needed

Include essential definitions in your introduction.

- The budget is a key element of a grant application, itemising the projected costs of a proposed project.
- The budget plan indicates to prospective funders how you will organise the project and spend the money over a given period. They can see where their money would go.
- The budget justification demonstrates that your project is well conceived. It minimises the risk that sponsors will arbitrarily reduce or eliminate budget categories. Sponsors/ funders have a good idea of what a project should cost, so they can generally tell if you are over- or under-budgeting.

Step 2. Identify the necessary resources

As needed

In their project groups, students read and discuss the sections on resources and costs in the call for proposals, and any additional guidance by that funder.

Share any additional resources (video, PowerPoint) and invite students to call on you or co-facilitators if they have queries.

Step 3. Fill the budget template

As needed

In their project groups, students discuss:

- Budget template for the grant call.
- Budget items.
- Budget costing.

Each group fills in the budget template for the call.

Session 4. Feedback and Evaluation | Allow 12 hours

Students learn how proposals are evaluated and how to receive and handle feedback from reviewers.

Outcomes

By the end of the session, students can:

- Describe the evaluators' criteria for assessment.
- Identify best practices and lessons learned for proposal development.
- Explain how they will develop successful grant proposals in their future research career.

Preparation

Students

Submit the research proposals they have developed in response to the mock call.

Guest reviewers

Review the group proposals.

Provide feedback on each proposal.

Identify the winning group.

Facilitators

Find or prepare "indicators of a winning proposal".

Invite three people from among the proposal reviewers and facilitators, to participate in a concluding Q&A / panel discussion on grant proposals.

Assessment

Grant proposal (groups).

Participation in discussions and group (individuals).

Steps

Time	Step	Who
As needed	1. Review feedback	Plenary
As needed	2. List indicators of a winning proposal	Groups, plenary
As needed	3. Conclude the grant-writing assignment	Plenary, panel

Step 1. Review feedback

As needed

Allow at least a day for reviewers to give feedback. Then share and discuss in plenary the feedback on each proposal. Explain the most significant points in each set of feedback. Invite and respond to students' questions and comments.

Step 2. List indicators of a winning proposal

As needed

In their groups, students begin a list of indicators, drawing on the feedback on their proposals.

In plenary, combine the lists and suggest any missing items. Share the final list with all participants.

Step 3. Conclude the grant-writing assignment

As needed

In plenary, raise and discuss broader issues around grant application.

Introduce a three-member panel of reviewers and facilitators to respond to students' questions about grant applications.

Announce and applaud the winning proposal