

Production Activity Summaries

The Production Activities have students actively involved in the processes of planning, doing, revising, and assessing. These activities will typically be assigned only once in the production process but may be referred to or used in assessment at several points. These activities are appropriate for projects in any medium, and are listed here in order.

Brainstorming

Brainstorming is a useful way of getting started or generating new ideas. It can be done as a class, in small groups, or by individual students. Once students are familiar with the process, student can use this technique on their own when they are stuck, revising their work, or moving on to a new phase.

Choosing a Topic

The purpose of this activity is to help students "warm up" before choosing a topic. In this exercise the students and teacher establish an understanding of what's important in a topic choice, brainstorm and discuss topic ideas, and explore several suggestions for making the project relevant to "real world" situations.

Beginning Research

Whether working in groups or alone, once students have chosen project topics, they may have trouble getting started on the research. This exercise will help students prepare a plan for researching their topics using brainstorming, group discussions, and progress updates (both oral and written). Teachers and peers will have the opportunity to review research plans and provide valuable feedback to the students. Teachers and students will also have documentation of students' early plans to compare with updated or final research plans for assessment of student progress.

Defining Your Audience

By defining their own audience, students are better able to communicate their message effectively. This activity helps students develop a clearer picture of the purpose of their project, who their audience is, and what they want to communicate to that audience.

Rapid Prototyping

Rapid prototyping is a way of generating many different solutions in a short period of time. Often, prototypes can illustrate what features of a project will work and what will not in a short amount of time. Rapid prototyping can be thought of as brainstorming with materials.

Making a Pitch

In this exercise students make a persuasive presentation of their project plan as a way of organizing the pre-production work they've done so far, getting peer and teacher feedback, and assessing their readiness to proceed with the project.

Getting Releases

As students collect material for their projects, they may need releases or special permission for published material or images or recordings of people. This information is important for students to consider early on in their planning.

Interviewing

Interviews can provide exciting links to real world expertise and experiences. Students may use them as a background research tool or they may be incorporated into the project itself. This activity helps students plan for the interview process and assess their own efforts.

Project Management

This activity helps students begin developing an overall plan for managing their project. This plan may include a schedule, division of labor, budget, research plan, and/or list of needed materials, equipment, and resources. Teachers will review plans and meet with students to provide feedback on the structure and contents of the project management plan. Early and late drafts will be used for reflection and assessment.

1. Brainstorming

Activity Summary:

Brainstorming is a useful way of getting started or generating new ideas. It can be done as a class, in small groups, or by individual students. Once students are familiar with the process, student can use this technique on their own when they are stuck, revising their work, or moving on to a new phase.

Materials:

1. Community bulletin board for the class (chalkboard, dry erase board, chart paper, or a wall with post-it type notes)
2. Notebooks, Design/Idea Books, or Journals for keeping notes

What To Do:

1. Brainstorming begins with an idea-generating session. Students should generate as many ideas as possible, without evaluation or censorship. Quantity of ideas at this stage is more important than quality. Students should be encouraged to include wild ideas, new and different approaches, ideas that build on previous suggestions, and suggestions that have worked for them in the past. One person should be designated to record the ideas as they are given, preferably in a place where the whole group can read them. This session usually lasts about 5-10 minutes but may go for as long as 20 minutes.
2. In the same groups, or as a whole class, the students discuss the ideas generated and work to create a condensed list or a plan for moving forward. They can use questions, such as the following, to guide their discussion:
 - a. What does our list tell us about how we see this subject?
 - b. Are there areas or interests that are conspicuously absent from this list?
 - c. Do the ideas fit within our constraints (resources, time, access)?
 - d. Can new ideas be generated by looking at and discussing this list?
 - e. How should we go about selecting from this list?
3. Students may wish to sort the ideas by placing them into categories. De Bono suggests the following three: those of immediate usefulness, areas for further exploration, and new approaches to the topic.
4. Each group should keep a set of notes for future reference and follow-up. These notes can also help the teacher follow the progress of the group or individual students. If students are keeping Journals or Design/Idea Books, this would be a good time to ask for entries. In their journals, students might reflect on the process and the outcome of this exercise or respond to specific prompts from the teacher. For example, teachers might ask students to explain how they went about selecting a working set of ideas from their initial list or to chose one idea and describe how they might envision carrying it out. In their Design/Idea Books, they could record the ideas generated, their plan for going forward, ideas generated by this exercise that they may want to return to later in the project or use in a future project, and questions for the teacher, classmates, and mentors.

Notes to Teachers:

1. Brainstorming can be used throughout the project when students are beginning a new phase or when individual students or groups feel stuck and in need of new ideas. It is a good tool for group facilitators who can use it to focus the group or generate new ideas.
2. There are many assessment opportunities in brainstorming sessions for students as well as teachers. It is a good time for groups or individual students to reflect on what to do next; and for students, in written assignments or notebook entries, to reflect on the groups and the projects, and to ask questions of the teacher.
3. Students should be allowed to keep developing their ideas, without discarding or revamping their old ideas.

Variations:

The following are activities that use brainstorming.

Choosing a Topic

Beginning Research

2. Choosing a Topic

Activity Summary:

The purpose of this activity is to help students "warm up" by generating a number of ideas before choosing a topic. In this exercise the students and teacher establish an understanding of what's important in a topic choice, brainstorm and discuss topic ideas, and explore several suggestions for making the project relevant to real world situations.

Materials:

1. Materials for taking notes during the brainstorming session (such as chart paper, white board, chalkboard, or post-it notes)
2. Brainstorming Activity
3. Other relevant student work: Design/Idea Books, Project Journals

What To Do:

1. As a class, discuss the project constraints, such as subject or curriculum requirements, media or format requirements or constraints, the scheduled time frame, and the scope of the project.
2. The next step is to generate many ideas by brainstorming. For this session, students can work in their project groups, in groups of students working on individual projects, or as a whole class. The Brainstorming Activity has suggestions on organizing this activity and the ensuing discussion.
3. Finally, whether they are working individually or in groups, students select a topic. Below are several issues for teachers to consider as they are helping students with this process:
 - a. Once a list is generated students may still have a hard time actually selecting a topic. They may need help identifying which topics/questions are the most meaningful to them and should be encouraged to think about how can they add something of themselves to the project. (How students selected their topic can be an interesting assessment question for a teacher/student conversation or a journal prompt.)
 - b. Teachers will want to maintain a comfortable balance between the project's "constraints" and the students' "negotiables" (i.e. what the students have to do and what the students get to do) as students suggest unusual topics and creative approaches to the subject.
4. The way students frame their topics can have an impact on how they conduct their research, the perspectives they present, their analysis, and their conclusions. By framing their topics as questions, students can begin to think about where they are going with the subject and articulating what they find interesting about it. (Also see the Activity Variation below.)

Notes to Teachers:

1. As they embark on researching their subject, students should be encouraged to refine or broaden their chosen topics. Some students may find that they need to reframe their topic questions, others may want to completely change their subject. Frequent and early

feedback from peers, teachers, and mentors will help students to make the needed adjustments and work within the constraints of the project and their topic.

2. Students can make connections between their projects and real world practices by exploring how their topic is addressed by professionals in the field; by researching and implementing the production practices of professionals in their chosen media field; by selecting a topic that addresses a current or "unanswerable" question (see the Activity Variation below); and by preparing a project for an "authentic" audience with a real interest in or practical use for the material (for example a book for 2nd grade readers, a lesson on environmental science for 9th graders, or a presentation for a community organization).

Variations: "Unanswerable Questions"

1. Many real world media presentations address topics that have no concrete answers. In this activity variation, students are encouraged to address questions in their projects without clear cut answers and that require examining and presenting different perspectives. For example, a student who is interested in Mars might ask the questions "Is there life on Mars?" instead of pursuing a straight informational search on the planet or explaining a scientific question with a clear cut answer. Below are a series of questions for student and teacher discussions designed to familiarize students with the "practice of not knowing" and help them translate their own interests into "unanswerable" questions.
 - a. How many subjects can you think of that have been researched and reported on that have no real answers or final conclusions? Try making a list.
 - b. Why is it interesting and valuable to examine an unanswerable question?
 - c. How is the unknown dealt with differently in textbooks, documentaries, and sensational TV shows? Try comparing and contrasting several examples (such as a PBS documentary and an episode of *Unsolved Mysteries*).
 - d. What are some different ways of presenting questions which are "unknown"? How are content and style affected? Should the unknown parts be depicted as dramatic or matter-of-fact? What perspectives should be included?
2. Try brainstorming a list of current or unanswerable questions. Are these topics you are interested in? Try taking your own interests and reframing them as unanswerable questions.

3. Beginning Research

Activity Summary:

Whether working in groups or independently, once students have chosen project topics they may have trouble getting started on the research. This exercise will help students prepare a plan for researching their topics using brainstorming, group discussions, and progress updates (both oral and written). Teachers and peers will have the opportunity to review research plans and provide valuable feedback to the students. Teachers and students will also have documentation of students' early plans to compare with updated or final research plans for assessment of student progress.

Materials:

1. Writing materials and paper for the brainstorming session
2. Brainstorming Activity
3. Notebooks, Design/Idea Books, or Journals for keeping notes
4. Access to research materials (such as books, journals, newspapers, videos, the Internet, etc.)
5. Access to resource people (such as mentors, professionals, community groups, librarians, etc.)

What To Do:

1. This activity should begin with a class discussion on research. Below are some suggested questions to ask students.
 - a. What is research? What is a research plan? What does research mean and involve in different professions? What are some research activities students are already engaging in?
 - b. What resources are available to the students in the school and in the community? What additional resources can they think of?
 - c. What are some specific research requirements they will need to meet for this project? What is a primary source? How many do they need? Are they required to interview someone?
2. Next, students brainstorm a list of research ideas (Brainstorming Activity suggests ways to organize this exercise.) For this session, students could work in their project groups, in groups of students working on individual projects, or as a whole class. Students should be encouraged to think of new approaches to research, and there should be time for each project to be addressed.
3. In the discussion period following the brainstorming session, students or project groups create written plans for conducting their research. Even though their plans may change as they learn more about their subjects and become more familiar with the available resources, this plan will help them get started and serve as a guide. The following questions should be part of this discussion:
 - a. Are we getting more than one perspective on the subject?
 - b. What are the advantages of primary sources and secondary sources?
 - c. Are we using enough/ too many different sources?
 - d. Who else can we talk to about this topic?

- e. Have we considered sources on the Web, in books, in newspapers, in journals, anywhere else?
 - f. How reliable are our resources?
 - g. Are we straying too far from our topic?
 - h. Are we asking the right questions?
 - i. How much work can we get done each day/ week?
 - j. How will we know when we have enough information?
4. Peers and teachers can review or critique research plans using the questions above, and adding any additional suggestions or leads on research opportunities. Students/ groups should feel free to narrow or refine their topics as they go.
 5. Students/ groups should chart the progress of the research by keeping records of research ideas, their research plans, the research they have done, their bibliographies, and changes along the way in how they address their topics. These could be entries in Design/Idea Books or kept in a separate research notebook.

Notes to Teachers:

1. As they begin researching their projects, students should be encouraged to refine or broaden their chosen topics. Some may find that they are asking the wrong questions, others may want to completely change their subject. Frequent and on-going feedback from teachers and other students will help students make needed adjustments to their plans and help them stay within the constraints of the project and their topic.
2. Student notes (or entries in Design Idea Books and Journals) as well as early drafts of the research plan can be used by teachers and students to compare with later work when assessing student progress.
3. This activity does not need to be done by the whole class at the same time. To reduce problems of limited computer access, part of the class could begin this activity while others are engaged in learning a new technology.

Variations:

1. There are several other formats for students presenting their research findings other than their final project. Before or after the completion of their projects, students could prepare and present their research findings in the form of a research paper, an oral presentation, a poster, etc.
2. Students working in video should also think about what kind of video presentation they are preparing. Three common types of video presentations are 1) documentary (such as *National Geographic*); 2) investigative (such as *60 Minutes*); and 3) entertainment. Documentary and entertainment presentations require that you know your topic well before you start, and for investigative research you learn as you go.

4. Defining Your Audience

Activity Summary:

By defining their own audience, students are better able to communicate their message effectively. This activity helps students develop a clearer picture of the purpose of their project, who their audience is, and what they want to communicate to that audience.

What To Do:

1. Students begin by discussing the purpose of knowing who their audience is. Questions for students:
 - a. Why is it useful to know who our audience is?
 - b. What could we do with that information?
2. In groups or as a class, students generate and list ideas about who their audience is. The audience may be broadly or narrowly defined, depending on the nature of the project. Students may wish to consider the following:
 - a. If creating a commercial, students may be concerned with targeting a specific group.
 - b. If doing an academic project, students can try and determine who will actually see their project (just classmates? the entire school? parents? Internet users?).
3. Students should consider the age and sophistication of their audience, as well as how much knowledge their audience will already have about the subject matter.
4. Some student projects aim to demonstrate what students have learned, others aim to teach the audience something new. What is the purpose of the project and how will the audience respond to it?
5. Students discuss what they have determined about their audience and do some preliminary brainstorming to generate specific ideas about ways they can use the audience information to enhance their media product or communicate more effectively. Questions for students:
 - a. How can we write our text to communicate most effectively with this audience?
 - b. What type of visual features will appeal to them?
 - c. How will we maintain their interest in our message?
 - d. In what way will we give better understanding to the viewing audience?
 - e. What assumptions have we made concerning our viewing audience that are invalid? Do we expect them to know something from which they have no understanding
 - f. For the World Wide Web, do they have the software that is needed to view what has been produced? What other considerations need to be made for them?
6. Students record the description of their audience and the results of their brainstorming in their Design/Idea logbooks.

Notes to Teachers:

For a real world experience, students may take a prototype or sample of their production to their intended audience and get a feel for their audience's reaction and comprehension. These findings can be used to change or strengthen the project.

5. Rapid Prototyping

Activity Summary:

Rapid prototyping is a way of generating many different solutions in a short period of time. Often prototypes can illustrate what features of a project will work and what will not work in a short amount of time. Rapid prototyping can be thought of as brainstorming with materials.

Materials:

- A variety of materials for students to quickly "mock-up" a variety of different designs. Newspaper, cardboard, tape, glue, magazines, cans, toilet paper rolls, egg cartons, etc., can all be effective depending on the project that the students are doing.

What To Do:

1. As in brainstorming, encourage wild ideas.
2. Give the students 20 - 30 minutes to design.
3. When they've created a series of possibilities, give them time to evaluate what the strengths and weaknesses of each design would be.
4. Have the students write their findings in their journals.

Notes to Teachers:

One activity you could do to illustrate rapid prototyping is to design boats using aluminum foil (an activity that Engineering students do at Stanford University). Have the students quickly prototype a series of different styles, and see which ones float. Then the students conjecture on what some of the principles might be to get a boat that floats.

6. Making a Pitch

Activity Summary:

In this exercise, students share via a persuasive presentation what has been accomplished, and determining if they have done what is needed to proceed further. This activity also allows opportunity for peer and teacher review.

Materials:

1. Students will need any notes from previous planning sessions and any initial research they've done.
2. They may also want to have a rapid prototype for their project or an example of something they are trying to emulate.

What To Do:

1. Discuss the concept of a pitch, which is a persuasive presentation of a project plan. In preparing a pitch, each production team must work together to prepare a concise and persuasive presentation that includes some or all of the following:
 - a. a "high concept" statement (two sentence summary of the message)
 - b. a brief outline of how they will tell their story or message,
 - c. a research plan and/or some initial research
 - d. a rapid prototype of some aspect of their project
 - e. an example of something they are trying to emulate
 - f. a rough timeline for the project
 - g. a list of materials and equipment
 - h. a description of team staff, duties, and constraints
 - i. a definition of the audience
 - j. thoughts on why the project is a good idea and should be done.
2. The pitch can be presented in written form, or in a presentation to the class. Students can imitate the real world practice of making a pitch to producers and try to enhance their presentation with visual aids, music, dramatization, and audience participation.
3. Groups present their pitch and receive feedback from the class and teacher, including specific ideas for enhancing the project and comments on the overall feasibility of the production plan. Classmates can submit their comments in written form or verbally if there is a good forum for constructive feedback.

Notes to Teachers:

1. This is an opportunity for teachers to assess the readiness of the students to proceed with their projects and provide valuable feedback. Teachers or classmates may have the duty of approving the plan that is being presented. Teachers may wish to approve the pitch with special conditions to help students stay on track. (For example, "I approve the plan under the condition that you submit a production schedule to go with it.")
2. Students can use their Design/Idea Books to respond to and/or incorporate the recommendations they receive from the teacher and classmates. This is a way for students to assess the weaknesses and strengths of their planning thus far.

7. Getting Releases

Activity Summary:

As students collect material for their projects, they may need releases or special permission for published material, images, or recordings of people. This information is important for students to consider early in their planning.

Materials:

1. Standard Release Form,
2. Parent Release Form. Each form should be carefully read and adapted as necessary before printing and using.

What To Do:

1. Students should go through the material they have collected for their project and list the parts that are professionally produced or published, such as music or photos. To legally use these materials, they must write or call the owner of the material and obtain permission in writing to do so.
2. If creating Web documents, students need to be reminded that, as in other contexts, using verbatim text from other sites or paper sources is considered plagiarism. Scanning images, graphics, or text from other sites or paper sources is *not* acceptable if they will be published on the Web (unlike using such images one time for unpublished educational projects). Students should go through the material they intend to publish on the Web and eliminate or replace those items which have come from other Web sites or published paper sources.
3. Students should go through the material they have gathered and produced themselves and list any photos, video or audio recordings of people. Students should collect signed release forms from these people and/or their parents, especially if the project will be on public display, on the Web, or otherwise widely distributed. Similar permission should be acquired if full names or personal information will be included. Students should consult the sample release forms and adapt them as necessary to receive permission from individuals who are used in images or recordings. Students may want to work with parents and the teacher on strategies to circumvent the problem (e.g. showing faces but not names, referring to people by first name only, using graphics instead of personal photos, etc.).
4. Once students receive permission and/or releases they should keep them on file in a safe place and make copies.

Notes to Teachers:

1. The best way to use materials for free are those that are “public domain”. Large companies may allow use of materials, but the time delay can be many months, which you and the students may not necessarily have.
2. Release permission for materials is a major component of the expense in professional productions. For non-profit organizations such as schools, companies are much more lenient with their release policies and will often waive fees.

8. Interviewing

Activity Summary:

Interviews help students to do a more thorough job and link the theoretical with the concrete. Actual interviews can be incorporated into the process, and will help the students to make an accurate reflection of their own work.

What To Do:

1. Students should begin by defining what they want out of their interview(s) and who can do the best job. Local community leaders, government officials, business professionals, family and friends are all valid sources for interviews. Students should keep an open mind about their sources for interviews what they hope to glean through this step.
Questions for students:
 - a. Are we seeking information? opinions? a good story? something else?
 - b. How will the information from the interview fit into and add to our project?
 - c. Who are all the people who might have the information we need?
 - d. Of the people we could interview, who is available and willing?
 - e. Who do these people know that can contribute further to this step?
2. Keeping in mind the information they wish to elicit from the interview, students prepare a list of topics or questions for the interview. It may be appropriate to do some background research on the interviewee or the subject to be discussed. Questions should be clear and open-ended, and should include follow-up questions to get in-depth information.
3. If videotaping their interview, students will have additional technical considerations. If not video or audio recording the interview, students should discuss and make preparations for accurately recording the interview by hand, perhaps by having more than one note-taker and reading notes back to the interviewee.
4. Following each interview, students will benefit from reflection on the interview process and assessment of their efforts. In groups, students can review notes or video footage of the interview and discuss how things went. It may also be appropriate for other groups or the teacher to review and provide feedback on the interview. Questions for students:
 - a. What went well during the interview process?
 - b. What could have gone better?
 - c. How can we plan to avoid the same problems in the next interview?
 - d. How was the interview useful to our project?

9. Project Management

Activity Summary:

This activity helps students to begin developing an overall plan for managing their project. This plan may include a schedule, division of labor, budget, research plan, and/or list of needed materials, equipment, and resources. Teachers will review plans and meet with students to provide feedback on the structure and contents of the project management plan. Early and late drafts will be used for reflection and assessment.

Materials:

1. Accompanying page, Project Management Planning.
2. Journals or Design/Idea Books if appropriate.
3. Related Activities: If students are developing a research plan, Beginning the Research Process may be useful. If presenting their plan orally, see Making a Pitch.

What To Do:

1. Once they have a good sense of the purpose and direction of their projects, students meet in project groups and decide what and how they need to plan to get their projects done successfully. Students' age and experience with planning will influence how much guidance and structure they need to take a first try at creating a good overall plan for managing their project. The teacher may choose a few components of project planning to help focus student efforts or may give students the task of deciding themselves what it is they need to create their plan. To help students structure their plan, it may be useful to give students a template or sample plan, or students may benefit more from designing the structure and format of the plan themselves.
2. Having completed an initial draft of their plan, students meet with their teacher for feedback and perhaps also submit their plan for peer review. The first draft plans should be evaluated both for structure (e.g. what has been included, what is missing, overall format and usefulness) and also for content (feasibility of schedule or budget, appropriate division of labor).
3. Following this review, students should discuss and revise their plans accordingly, documenting changes and additions in Design/Idea books, journals, or elsewhere.
4. Students can use their project management plans for a midway review, to gain approval to proceed with their project, or for their own reference as the project proceeds. To enhance the learning that occurs in the planning process, all student planning decisions should be explained, justified, and documented, perhaps in the form of an oral presentation (see Making a Pitch) or a written project proposal. Students will inevitably make changes to their plans as their project proceeds. These ongoing changes students make should similarly be documented, explained, and justified.

Notes to Teachers:

1. Encourage students to save original plans instead of just redoing them and erasing evidence of changes. This way when the project is completed (or work on the project has ceased), students will be able to review their original plans, any changes they made, and the final product. This body of documentation can provide a conversation piece for students and teachers as they reflect on the production process and assess the work.

2. Reflection and self assessment topics for students might include:
 - a. describing the unexpected snags and how they were overcome (or not overcome)
 - b. if in groups, how the group functioned to plan, make decisions, and troubleshoot
 - c. how their original concept compares to the final product
 - d. whether and how the planning they did was important and helpful
 - e. how they as individuals fulfilled designated responsibilities and made unique contributions to the project.
3. As assessment opportunities, project management plans can give teachers insight into what students are thinking about at various stages of their project. The initial draft presents a good opportunity to provide valuable feedback and raise important considerations for students. Students' performance on developing project management plans can be assessed, as well as the way they respond to suggestions for the plan, and how they actually utilize the plan during the production process. Production plans may also be a good source of long-term assessment. If doing more than one project over the course of a year, compare students' early attempts at developing project management plans with their accomplishments later on.

Variations:

1. In addition to or instead of creating a listed schedule for their project management plan, students may create a timeline. Either computer-generated, drawn, or made into a poster for the classroom wall, timelines can remind students and inform the teacher of project progress.
2. Students may design a visual "people map". Again, either computer-generated, drawn, or as a poster, the people map can show who the group members are, what jobs they are doing, and how they fit into the overall project.