Chapter 6

Sociocultural processes of creative planning in children's playcrafting

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LESLEY: [complaining about making too many changes in the play] If we make up the whole thing over again it will be too hard.
CAROL: No it won't.
ROBIN: No it won't.
LESLEY: We can't do it all right now.
ROBIN: Yes we can. We almost already have. When we think of the parts, we think of the play.
KIM: Yeah!
CAROL: Yeah!
KIM: We just think of who the people are and...
ROBIN: ...and what they're going to do... And then we can organize it.

(Snow White, Session 3)

This chapter explores the sociocultural processes of creative planning through an examination of the process of children's collaborative creation of a play. We argue that creative planning processes are grounded in practical considerations of sociocultural activity, in a wedding of imagination and pragmatics. Original, workable ideas evolve from a process that is the synthesis of spontaneous improvisation and organized, directed activity, as individuals participate with others in sociocultural activities. We examine how a collaborative interactional system develops in the process of planning, and how this social organization is essential to the planning process, as a group of young children plan a play. We follow the germs of the children's ideas as they are offered, critiqued and elaborated by each other, and consider the
An investigation of children's physical activity

Creating a social cooperative activity

Planning occurs

The development of the social and cultural conditions in which the child participates

Practically, in order to allow the classroom planning process we must think of the classroom as a social cooperative activity. It is composed by the interaction between the different participants who make up the group. Each participant, in his or her role, contributes to the process of construction and maintenance of the cooperative activity. Their actions are influenced by the social and cultural norms of the group, which are reflected in the classroom environment.

Our goal is to develop a classroom environment that fosters cooperative learning and social interaction. This involves creating a physical and social space that encourages students to work together, share ideas, and support each other.

Planning should be an ongoing process that involves all members of the group. It is important to involve students in the planning process to ensure that their needs and interests are taken into account. This can be done through discussions, brainstorming sessions, and other collaborative activities.

By creating a social cooperative activity, we can help students develop important skills, such as communication, collaboration, and problem-solving. These skills are essential for success in today's increasingly interconnected world.
involves a pre-existing script or algorithm for solution. Our goal was to examine the playcrafting process in as natural a situation as possible, to tape the playcrafting process as it unfolds in a setting that was not of our design.

Playcrafting sessions, rather than individual subjects, are our unit of analysis. We followed the group's ideas as they developed across time, with individual contributions woven together. We are not attempting to separate out individual contributions to examine the characteristics of individuals as independent units, although we do, of course, attend to how each child's contributions are woven together in the whole effort. Our focus on the development of the event is consistent with a contextual approach (Rogoff, 1982; Rogoff and Gauvain, 1986) and with the method of activity theory (Leont'ev, 1981).

Our analysis concentrates on one play, Snow White, that was produced as part of the writing curriculum in a 2nd/3rd grade classroom in an 'open' non-traditional school where creative activities such as playcrafting are common and children are routinely expected to collaborate on classroom projects and to organize their own activities. Interpersonal problem solving and management of one's own learning activities are an explicit part of the curriculum. The classroom teacher serves as a resource and guide in a 'community of learners'. Thus, the cultural context of the children in this classroom is one that includes sustained attention and creativity in child-managed collaborative projects, with comfortable use of adult assistance and guidance but not dependence on adult management.

Children were assigned by their teacher to plan and perform their own versions of a fairy-tale. (The class chose four tales to make into plays; Snow White was one of two in which the group created a new version of the play rather than just to enact a traditional version.) Over the course of one month each group planned and practised its play with intermittent assistance from the classroom teacher and a student teacher, and then performed its play for classmates and adult visitors.

The teacher's role in structuring the task

Preparing the planning and writing task

Before initiating the project the teacher conducted library research on fairytales, set up a fairy-tale reading centre in a corner of the classroom, showed students a video presentation of Rumplestiltskin, and 'piggy-backed' this group project with an individual fairy-tale writing assignment. The teacher explained: 'I see this as a learning experience that you will learn all sorts of skills from. You will be doing some reading and some writing. You will do planning and organizing. These are all skills that we are trying to learn.'

The teacher, in conjunction with the students, structured the task by listing common elements of fairy-tales (e.g. begins 'Once upon a time', has a happy ending). This list was later copied from the blackboard onto a posterboard and remained visible to the students throughout the month. The teacher also provided the groups with an important organizational tool for their planning of the plays: a coloured sheet of paper on which each group was to list the participants, the play's title, the characters, the setting and main events (including problem and solution).

Structuring the collaborative process

The teacher viewed this project not only as a cognitive task (it was clearly part of the reading and writing curriculum for teacher, students and parents alike), but also as a challenging social task. She attempted to maximize student success on the interpersonal problem-solving processes as well as the planning of the plays themselves.

Groups were formed with attention to the academic and interpersonal strengths of the individual children. After the teacher helped the students generate a list of fairy-tales and select four to produce, she asked students to select their first and second choices. During recess the teacher (assisted by a parent volunteer) grouped students according to their preferences and according to her perception of individual cognitive and social strengths and weaknesses:

PARENT: I think that would balance the group.
TEACHER: Uh huh. We haven't put anybody in here with real strong writing skills.
PARENT: Sarah's pretty good, isn't she?
TEACHER: Mmmm, she's OK, but she won't take a leadership role. Um, who ...
I'm kind of wondering is if we got Jason in there, he could be a leader.

When the students returned from recess the teacher told them which group they were in, and emphasized that their task would be socially as well as cognitively challenging. She offered suggestions for successfully working as a group and for managing inevitable social struggles:

TEACHER: You'll vote as a group and you'll say, 'OK, do we want to do it the old way or the modern way?' and everybody will have to discuss it and say the pros and the cons. When having a little group there are certain things that make it positive and certain things that make it hard. One guy has an idea and says, 'MODERN! MODERN! I want it modern.' Does that help the group?
KIDS [in union]: No!
TEACHER: Or if some kids just sit there and don't say anything, does that help the group?
KIDS [in union]: No!
TEACHER: OK, so you have to figure out a way to make the group work. What if I
Method for Examining the Course of Events

...
attempting to resolve disputes regarding the 'real' story, at the end of the first session the girls decided to modify the traditional story model and collaboratively develop 'twists' on the traditional story (Levels 1, 2 and 3).

During the second and third sessions, there was still a great deal of planning how to plan (Levels 1 and 2), with greater emphasis on deciding the main theme and events of the play (Level 3). In the second planning session the girls moved from the creation of a general story model to the development of a script of lines and actions (Levels 3 and 4). In the third session there was still great attention to how the play should be planned, deciding how to divide and distribute roles, and attempting to make these decisions (Levels 1 and 2).

A shift in activities took place about the fourth session, as can be seen in Figure 6.1. During the first three sessions the groups planned in advance, 'out of action', sitting around a table and discussing many ideas that would later be incorporated into their play. During the fourth session, the girls began to practise what they had planned. While practising, they improvised, planned 'in character', and practiced planned events. The shift was entirely managed by the children, as were almost all the moves between levels of planning in the first sessions (the major exception being the teachers' intervention in suggesting a modification of the tale at the end of the first session).

Essential to the first four sessions was building a social foundation to allow the girls both to complete the cognitive aspects of their task and to work effectively as a group. Once this foundation was built, the group was able to communicate and plan 'in action' during the course of the remaining sessions, which they treated as practice sessions. From the fourth session, the girls spent a great deal of time practising - a phase that they marked by labelling it as such, as well as by changing the physical setting from working around a table to rehearsing in the hall outside the classroom. From sessions four through ten the group spent incrementally more time rehearsing, planning in character and improvising, and less time planning out of action (see Figure 6.1).

Advance planning and planning during action

The girls engaged in flexible, opportunistic planning (Hayes-Roth and Hayes-Roth, 1979; Rogoff, Gauvin and Gardner, 1987), beginning with a greater balance of advance planning (especially Levels 1, 2 and 3) during the first four playcrafting sessions and then focusing to a greater extent on planning during action (especially Levels 3, 4 and 5). During the course of action old plans were modified, new plans developed and improvisations emerged. Planning during action is not an appendage or consequence of advance planning, but rather an integral aspect of opportunistic planning.

Advance planning involved the organization of future activity through
The development of the prefrontal cortex is a critical process for the development of executive function, decision making, and inhibition. The prefrontal cortex is responsible for regulating the balance between approach and withdrawal behaviors. It helps to control impulses and make decisions based on long-term goals. The prefrontal cortex also plays a role in emotional regulation and the ability to delay gratification.

The prefrontal cortex is involved in a variety of cognitive functions, including working memory, attention, planning, and problem-solving. It is also involved in the regulation of motivation and the ability to inhibit impulsive behavior. The prefrontal cortex develops slowly, with significant changes occurring throughout childhood and adolescence.

The prefrontal cortex is also important for social behavior, including the ability to understand and respond to the emotions of others. The prefrontal cortex is involved in the processing of social information, including facial expressions, body language, and vocal intonation. It helps to regulate social behavior, including aggression, cooperation, and empathy.

The prefrontal cortex is involved in a variety of mental disorders, including schizophrenia, bipolar disorder, and depression. The prefrontal cortex is also involved in addiction and compulsive behaviors.

The prefrontal cortex is an important target for neuroimaging studies, as it can be difficult to study in humans using traditional techniques. However, advances in imaging technology have made it possible to study the prefrontal cortex in greater detail, leading to a better understanding of its function and its role in a variety of mental disorders.
of several events involving the banana reflected the girls’ adjustment to practical constraints, their creative use of each other’s ideas to advance the group product, and the process of adjustment of the plan over time.

Another example involved the use of a fortuitous circumstance in creating a scene. During the first session, the girls considered how they could have a talking mirror, and a number of possibilities were discussed, one of which was to have a hole in a mirror with an actor speaking in the hole. All six girls participated in this discussion, which ended without resolution as one girl brought them back to the need to focus on main events. Nothing more was done with the mirror issue until the ninth session, when the evil queen went to look in a pretend mirror but was inconvenience by the student teacher who was right where she wanted the mirror to be. She told him to move. But his being there seemed to have prompted the idea of having a person play the mirror, and she asked a classmate to come over to be the mirror and told her the mirror’s line. This feature was replayed in the tenth session, and appeared in the final performance as well. In this example, the creative planning built on an intrusion to develop a creative germ that had been mentioned long before. Related processes have been observed in children’s pretend play in early childhood (Göncü and Kessel, 1988).

Planning during action: in character or improvisation
We observed two types of planning during action: planning ‘in character’ and improvisation. Planning in character took place during activity, within the context of rehearsals or planning of script lines. It typically involved filling in gaps in dialogue or action of communicating the need for a character to appear on stage without breaking the momentum of the rehearsal. In the following example from the seventh session, the group had not yet discussed an ending for the play. Since it was unnecessary to stop the rehearsal in order explicitly to plan an ending, Robin (as the wicked stepmother) took the initiative and summarized the finale, in character and without interrupting the course of action: ‘Then the prince gets his wizard to turn all my mirrors black every time I look in them. So that I die if I look in them. OK?’ Once this plan had been devised, during subsequent rehearsals the group was able to remember the course of events and add dialogue and action through improvisational techniques.

When improvising, the girls planned and carried out actions and events simultaneously, performing ‘according to the inventive whim of the moment’ (McCrohan, 1987; Dean, 1989). Improvisation differs from planning in character in terms of communicative focus. In the previous example, Robin explicitly communicated the plan to the group. However, in the following improvisational example the action and the plan were synonymous. In earlier sessions the group had decided on using a poisoned banana and that the dwarves would carry the princess over to a glass coffin. During the seventh session, the group improvised the dialogue:

**CAROL:** It’s a banana! She’s not breathing.
**STACY:** It looks a bit peculiar.
**CAROL:** She’s not breathing! Come on let’s carry her.
**STACY:** Try CPR!
**CAROL:** Let’s carry her off.

Improvisation allows for spontaneous modifications and elaborations without the need to reflect verbally on the plan and often without the need to establish verbally mediated consensus. If an improvised line or move seemed jarring, this led to discussion either in character or out of character.

Since the group had established consensus early on about the play’s overall structure and had developed shared modes of communication, during the later playcrafting sessions they could short-cut many of the formal negotiations and plan during the course of action.

Choosing advance planning and planning during action
The group evidenced struggles in managing a flexible adjustment of planning to blend the advantages of both advance planning and planning during action. On a number of occasions, the group evidenced tension between proceeding through advance planning or through planning during action. They had numerous discussions about writing the script all out versus putting the play together through acting, as in this example from the fifth session:

Leslie asks: ‘Do you want to write the scripts or do you want to take the play part by part?’
Heather suggests writing part of the script, then doing that part, then writing more script.
Leslie urges writing a script to avoid forgetting their lines, and suggests getting out of costume to write scripts. Eventually the girls write scripts.
Robin suggests: ‘Why don’t we all work together on one big script and then we can get it copied? So we can all work together on one script.’ [a solution to the problem of co-ordination]

The girls write, agreeing to focus on the first part of the play and just listing the names in abbreviated fashion.
Leslie remains concerned with co-ordination: ‘What if one person wants to say something and the other...?’
Robin reassures: ‘It will probably be all right.’
They write some more, and again Leslie worries about advance planning: ‘I just figured out our problem. We don’t know how the story goes.’
Robin reassures that planning in action will work: ‘We are just kinda making the story up as we go – as we act.’
Leslie is content: ‘Oh. OK.’

At times, the student teacher intervened to encourage more advance planning, urging the group to resolve each conflict before going on. However, the girls largely ignored him. His suggestions would have been
Social organization of creative planning

When is creative planning needed? How can we go about planning in a creative way?

Contrast with children's initial planning during different stages.

Decomposition with brainstorming and creative exercises.

The show how the group's interaction among different perspectives and understanding
cultural institution in which the children worked – school. Before the first session, the teacher provided anchors for the planning process in her management of the classroom to choose four plays as a basis of the projects and to determine with the children who was to work on which play, after lessons on the structure of fairy-tales. Her requirement to produce a written script also channelled the process.

Another means of anchoring the process, and of encouraging planning at higher levels, was the teacher’s provision of the planning sheet requesting the children to determine the characters, the setting and the main events. The use of this sheet was managed in the first session by Stacy, who repeatedly directed the group back to determining characters or main events when they strayed into too much detail on planning props or dialogue, as in the following example:

When the girls got involved in discussing how to make a talking mirror, Stacy tried to get them back to general planning. She interrupted, tapped the girl who was leading the mirror discussion with her pencil, and said ‘Main Events’.

But the discussion remained on the mirror topic.

Stacy tried again, exasperated: ‘We are going to do the Main Events.’

When the others continued discussing the mirror, Stacy asked: ‘What are the Main Events?’

Finally the girls turned to reconstructing their memories of the main events of the tale. But after some progress, the girls began to worry about how they would produce the setting.

Stacy tried to move away from this level of planning, insisting: ‘We aren’t doing this right now. We are on the Main Events right now.’ And the girls returned to listing the main events.

At the end of the first session, the main events for Snow White were written as:

the queen was snow white
killed. Snow white eats a poonsad
bananas snow white gets stranged
snow white gets bereed and the
price comes and they get meryd.

The girls also used the traditional story line of the play as an anchor for their planning during the first day, relying on cultural knowledge outside the structure provided by the teacher. However, since the girls did not share a common story line (due to having seen two different video versions of the tale), their common ground here was not solid. Intersubjectivity was repeatedly disrupted, until the girls understood the basis of the misunderstanding. Eventually they checked understandings with each other.

In Session 2, when Heather and Robin disagreed on how the dwarves should carry their shovels, Heather checked, ‘Have you seen the Walt Disney one?’ before going on with a proposal: ‘OK, well you know how they swing back? [she demonstrated] They go like that.’

Sociocultural processes of creative planning

Many of the girls’ disputes could be traced to apparent consensus but with different underlying assumptions that later surfaced as problems. The problem of differing assumptions was resolved when the teacher suggested that they make up a modern version of the play, and the girls eagerly accepted this solution to their interpersonal trouble.

Hence the decision to create rather than reproduce a play resulted from interpersonal difficulties in establishing a common ground. The idea of modifying the traditional tale had been suggested before the beginning of the sessions by the teacher, and during the session by several girls. But it was not until it appeared as a solution for the difficulties in co-ordinating ideas across people that it was adopted:

The teacher suggested: 'Why don’t you guys think up a totally new version? A modern-day version?'

The group made favourable comments, and Robin supported the idea: ‘I think that it would be neat to come up with a modern-day version. Like Snow White eats a poison lemon or something.’

After further discussion, Robin gave more support to the idea of a new version as a way of achieving consensus: ‘We could have a whole new thing and then everybody would be figuring it out all together and then nobody would have seen it i.e. quarrel about the “real” story.’

The group began immediately to brainstorm.

For the second session, the anchor for planning was elaborated by Robin’s production, at home, of a modified story line in which many events were made to be opposite to the original tale. She reported to the group that she was following their group decision: ‘I just totally changed it. Remember how we were going to make a new one? So I just did that.’ When she read the story to the group they were largely enthusiastic.

Although this version did not persist intact, Robin’s play served as a new anchor point, both for those who accepted it and for those who argued against it. The argument derived from a girl who had been absent at the previous session and was not pleased with changes occurring in her absence: ‘Well, she shouldn’t have done it until all of us like it . . . It’s supposed to be Snow White, not Black Night.’ With the teacher’s support, the group pulled together to reach a new agreement, and this resulted in a change of the name of the play, from the revised name offered by Robin:

The teacher probed: ‘What could you do to solve the problem?’

Leslie suggested: ‘We could change it . . . Could we just change the name instead of Black Night? Would that help?’

The girls discussed alternative names. After much more discussion, and attempts by the group to have each girl write individual ideas to be mixed together, Leslie offered an efficient compromise: ‘If we have a little of Robin’s Black Night, if you want to, we could have Snow White Black Night.’ In discussion, the idea of Blue Sky came up, and Leslie suggested: ‘How about Blue Night? Cuz, some of your [Robin’s] idea and some of their idea.’
The social-cognitive and behavioral mechanisms of decision making and the role of emotional factors in the planning process. The importance of understanding the neural basis of decision making and its relationship to executive functions and memory systems. The role of context and environment in shaping decisions and the impact of cultural and social influences. The role of motivation, goals, and values in guiding decision making. The role of feedback and reinforcement in learning and decision making. The role of experience and learning in shaping preferences and decision rules. The role of attention and working memory in decision making. The role of decision making in shaping behavior and influencing outcomes. The role of decision making in shaping future events and shaping the environment. The role of decision making in shaping personal identity and self-regulation. The role of decision making in shaping social interactions and relationships. The role of decision making in shaping economic and political outcomes. The role of decision making in shaping health and well-being. The role of decision making in shaping environmental and natural resource management. The role of decision making in shaping technological and scientific progress. The role of decision making in shaping cultural and artistic development. The role of decision making in shaping personal and societal values.
facilitated the creation of the play, with indivisible social and cognitive processes. During the initial four playcrafting sessions sociocognitive vehicles for the co-ordination and generation of ideas were built by the group, and as they were built, the group was able to use them to create its play. On the fourth day the group was able to achieve a coherence between cognitive activities and social organization. After the fourth day it spent most of its time planning specific dialogue and action, and rehearsing.

The Snow White group’s methods and product contrasted with many of the other groups’ playcrafting sessions, which did not employ a method of shared decision making. For example, in one of the other fairy-tale groups an adult needed to remain with the group for all ten sessions in order to dictate the method of collaboration and to structure the task. The adult became responsible for generating ideas, negotiating conflict, and attempting to motivate the group’s efforts. Another group elected not to collaborate on a joint project, but rather to work on individual products that were later performed separately. In these instances the groups did not develop a means of collaborative management of ideas, and their interactions and plays were of a much different nature from those of Snow White, in which the group developed successful interaction patterns and used them to develop a play together, working almost independently of adult direction. We argue that collaborative methods of social organization were essential to the group’s handling of a variety of cognitive tasks.

Summary

In this paper we have argued that creative planning can best be understood as a sociocultural process involving both advance and improvisational planning. Whereas many traditional perspectives view creativity and planning as cognitive processes, mental possessions or individual traits, our purpose has been to explicate sociocultural processes in children’s collaborative creative planning. We emphasize both the process and the sociocultural nature of planning by arguing that in order to plan collaboratively children need to develop ways of managing both social relations and the cognitive problems inherent in the project. Social interaction patterns constitute the cognitive course of the creative process and, in mutual fashion, cognitive processes constitute social organizational patterns.

We stress the dynamic, sociocultural nature of the processes of creative planning. Sociocultural contexts provide fertile ground for the development of new ideas and structure creative planning as ideas emerge and evolve in new ways. Regardless of whether we investigate artistic, scientific or everyday creative planning, all take place within sociocultural communities. The individual contribution to creative planning is only a part of a broader

dynamic sociocultural process, in which the whole is greater than the sum of the parts.

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References
