Slowmation Lesson Guides by Vetta Vratulis (University of British Columbia)

These are lesson guides for each grade and adjustments/suggestions for grade levels are represented in red. The new colours in each grade represents "considerations" or "strategies" specific to that grade level. This way students can specifically identify how narrative for slowmation is different in grade 2 vs. grade 5.

Kindergarten

Materials: Laminate a large poster board (size)

Washable colours White board eraser

Materials for creating their projects (i.e. construction paper, clay,

leggo etc.)

For the younger grades it saves a significant amount of time to divide the poster board up into individual frames ahead of time. Laminate the poster board after you have divided it up into individual frames.

Ensure that each group member has a different colored felt. This can serve as an informal way of assessing involvement and progress as students start to work on their individual frames.

Pre-teaching (1 class)

Decide on a theme before they begin storyboarding. This can be done as a class or you can just assign a theme depending on your time frame. Kindergarten students respond really well to the theme of adventure and/or fairytales.

Model for students how to create a story that can be divided into individual frames. For instance, consider the following steps:

- * Divide the chalk board at the front of the room into key frames large enough for the class to see. Have this already in place on the chalk board before students arrive. A white board or a projector also works well because of the easy use of multiple colors. This depends on what is available in your classroom.
- * Tell students a short story that you have created with names of students in the class. This story should include approximately 6

key points. Ask students to identify key features of a story. Make a list to keep in the classroom. You can then keep building on this as the year continues.

- * Come up with a story as a class. You come up with the first sentence, the beginning. Then, have the class contribute 5 more key events that will further the story. Keep in mind you may have to remind them about beginning, middle, end. Ensure to create a copy of the key events for the class to see as they are being created. This is important in order for them to make the connection to storyboarding later on.
- * Return to the first event and start to discuss with the class what that might look like in a frame. Start to draw out the images as the class continues to tell you what to include. (ie. One day there was a magic dragon what does the dragon look like? Where is he? Is it day or night? Should he look friendly or scary? Etc.)

Once you have gone through this process with the class they will have a really strong understanding of how to storyboard.

Storyboarding (1 class)

Divide students into groups of 4-6.

Each student will have their own colored marker. This is just to sketch out their storyboard on the laminated poster.

As a group they will come up with a story. This story should have a beginning (approx. 1 frame), middle (approx. 2 frames), a challenge or twist (approx. 2 frames) and an ending (approx. 1 frame). Some classes don't need this much structure, but others really find it helps with breaking down the story. It is useful to record the story because they may forget part of it by the final class. Each student in the group can write down their part of the storyline. Sometimes, depending on time, using tape recorders can also be useful. If there is time, writing the story is recommended.

* Students should definitely document the narrative they are going to use at this point. Their narrative might be just reading their line from the story, or it might involve sound effects, or character voices. It is important they have a narrative that works at this point because once the practice reading or saying their narrative they may find there are additional elements they want to include in each frame.

Each group member is then responsible for one frame.

Once the storyboard is complete, model for students how they might check to see if anything additional is required in any of the frames. This is an additional step for encouraging group work. It works really well, but only if there is time. This step usually takes about 10-15 minutes. The teacher may have to model this process (i.e. how do we make suggestions to our friends?)

Transfer (1 class)

Have students each create the image from their storyboard with materials provided by the teacher (i.e. clay, leggo etc.) Students may also select to bring materials from home. It is important to remind students that if they are bringing materials or toys from home they have to be willing to share those materials and/or toys with their group. For instance if a group decides to use a leggo farmer, then, they have to be willing to share that leggo farmer with the rest of the group. Some characters will have to appear in more than one frame.

Student practice reading the line they want to include as the narrative. As a group they may decide to each read a line, or select to be the voice of different characters in the story etc. This takes practice!

Once each frame is ready, each group member can take a picture of their frame. The teacher may select to have group leaders responsible for taking the pictures as long as each group member has been shown how to use the camera. This depends on the class. If time is a concern, it may be useful for the teacher to show students how to use the camera but then for them to take the final pictures of the frames in a row. That makes it easy for the teacher to just "dump" each frame in sequence into I-movie or moviemaker.

With the younger grades, teachers sometimes prefer to just demonstrate for students how to import their images into i-movie and/or movie-maker. But for the actual movie they just complete this step and then go to each group and have them record their narrative. It is helpful for students to see the frames as they record their narrative. Otherwise, especially with the younger grades, the timing of their narrative might not match each frame.

Teaching students to import their images will take an extra class. But the same process as what is described in grade 1 can be used in Kindergarten. At least 1 tech coach from the group, or a buddy system if possible, should be in place if students are going to

import their own images. The teacher would meet with the tech coaches or buddies ahead of time to ensure that they were comfortable with their role. In addition, the teacher would have to ensure that they were comfortable with using the technology.

Show and tell time! Perhaps invite another class to the viewing?

Grades 1-2

Materials: Laminate a large poster board (size)

Washable colours White board eraser

Rulers

Materials for creating their projects (i.e. construction paper, clay etc.)

For the younger grades it saves a significant amount of time to divide the poster board up into individual frames ahead of time. Laminate the poster board after you have divided it up into the appropriate number of frames (8-12).

Even if students are dividing up their own storyboard, I would have several poster boards available for students with already divided up frames. All poster boards (frames already divided and blank poster boards) should be laminated in advance. This saves money and time if the frames do not initially turn out as students expect. Laminated poster boards allow them to make changes if the storyboard does not initially look as they intended. The decision for using already divided up poster boards depends on the time you have available for this project.

Asking students to divide up their own storyboard creates an interesting opportunity for a Math lesson.

In grade 2 students are encouraged to create their own frames on the laminated poster board. This is a key difference between grades 1 and 2.

Ensure that each group member has a different colored felt. This can serve as an informal way of assessing involvement and progress as students start to work on their individual frames.

Pre-teaching (1 class)

Decide on a theme before they begin storyboarding. This can be done as a class or you can just assign a theme depending on your time frame. Grade 1 students respond really well to the theme of adventure and/or fairytales. Grade 2 students may require more options. They usually prefer to pick their own theme. For a grade 1 / 2 split I would have some ready themes available but also provide them with the option of selecting their own theme.

Model for students how to create a story that can be divided into individual frames. For instance, consider the following steps:

- * Divide the chalk board at the front of the room into key frames large enough for the class to see. Have this already in place on the chalk board before students arrive. A white board or a projector also works well because of the easy use of multiple colors. This depends on what is available in your classroom.
- * Tell students a short story that you have created with names of students in the class.

Or, come up with a story as a class. Perhaps you suggest the first sentence, the beginning. Then have the class contribute 8 more sentences (sequences) that will further the story. Keep in mind that you may have to remind them about beginning, middle (rising action), twist, problem, conflict, and end. Ensure to create a copy of the key points for the story for the class to see as they are being created. This is important in order for them to make the connection to storyboarding later on. In Language Arts, the curriculum distinguishes between features of storytelling, storywriting and narrative in grades 1 and 2. It may be helpful to consider this in how you outline and set up criteria for these two grades.

Or, read them a picture book or short story that has a very simple story structure. Ensure the story is not rich in narrative detail or they will try to mimic this in creating their own story. This will not work when they are storyboarding.

The story you model for the class should include approximately 8 key points. The 8 frames are more for the benefit of the grade 1 students. Ask students to identify key features of a story. Make a list to keep in the classroom. You can then keep building on this as the year continues. The additional frames allow for the additional curricular requirements for narrative structure in grades 1-2. In grade 1 it is appropriate to increase frames to 8 but I usually double the frames for grade 2. This may require 2 poster boards. Another option is to have students construct their story, then, create the number of frames that are appropriate for their story. This works well with grade 2 but not as well with grade 1. If grade 2 students are creating their own frames I would suggest a minimum of 8 and a maximum of 12. They may not initially realize how long each frame takes to create.

* Return to the first event and start to discuss with the class what that might look like in a frame. Start to draw out the images as the class continues to tell you what to include. (ie. One day there was a group of friends. They went to school together. They were all scared of the classroom bully. What is a really simple way to

illustrate friendship? What does a bully look like? Where are they in the first frame? Is it night or day? Etc.) There are different expectations of narrative and story structure in Kindergarten, grade 1 and grade 2.

Once you have gone through this process with the class they will have a really strong understanding of how to storyboard.

Storyboarding (1 class)

Divide students into groups of 4-6.

Each student will have their own colored marker. This is just to sketch out their storyboard on the laminated poster.

As a group they will come up with a story. This story should have a beginning (approx. 1 frame), middle (approx. 2 frames), a challenge or twist (approx. 2 frames) and an ending (approx. 1 frame). It may be useful to provide grade 1 students with this sort of structure, as a basis. This may be especially important if there are students struggling with their literacy skills. However, if this is not the case I would avoid breaking the story down into individual frames. By grade 1 and 2 it is critical that students are challenged in their process of story construction and representation. In a grade 1 / 2 split each group should write a copy of their story for record. Sometimes, depending on time, using tape recorders can also be useful. However, as already stated, writing the story is recommended.

The teacher may want to collect the storyboard and group narrative at the end of class as part of an assessment of the process. The teacher may also assess student progress by consulting with each group near the end of class. In particular, it is very useful for the teacher to read the narratives the students have created. This provides an opportunity for feedback.

* Students should definitely document the narrative they are going to use at this point. Their narrative might be just reading their line from the story, or it might involve sound effects, or character voices. It is important they have a narrative that works at this point because once the practice reading or saying their narrative they may find there are additional elements they want to include in each frame.

Each group member is then responsible for completing at least one frame. I would divide frames up for the grade 1 class, but would

allow for autonomy for the grade 2 class. As long as each group member is responsible for at least one frame, they may select the rest of the work up according to their strengths/ interests etc.

If time allows:

Once the storyboard is complete, model for students how they might check to see if anything additional is required in any of the frames. This is an additional step for encouraging group work. It works really well, but only if there is time. This step usually takes about 10-15 minutes. The teacher may have to model this process (i.e. how do we make suggestions to our friends?)

Transfer (1 class)

Have students each create the image from their storyboard with materials provided by the teacher (i.e. clay, leggo etc.) Students may also select to bring materials from home. It is important to remind students that if they are bringing materials or toys from home they have to be willing to share those materials and/or toys with their group. This is more relevant for grade 1 than grade 2 students. For instance if a group decides to use a leggo farmer, then, they have to be willing to share that leggo farmer with the rest of the group. Some characters will have to appear in more than one frame.

Once each frame is ready, each group member can take a picture of their frame. The teacher may select to have group leaders responsible for taking the pictures as long as each group member has been shown how to use the camera. This depends on the class. If time is a concern, it may be useful for the teacher to show students how to use the camera but then for them to take the final pictures of the frames in a row. That makes it easy for the teacher to just "dump" each frame in sequence into I-movie or moviemaker.

With the younger grades, teachers sometimes prefer to just demonstrate for students how to import their images into i-movie and/or movie-maker. For their slowmation projects, the teacher completes the step of importing and then goes to each group to have them record their narrative. It is helpful for students to see the frames as they record their narrative. Otherwise, especially with the younger grades, the timing of their narrative might not match each frame.

Teaching students to import their images into i-movie or movie-maker will take at least 1 extra class.

It is really important that the teacher has worked with a group of students in advance to ensure that they are comfortable with using the technology. Then as the teacher models the process for the class, there are group tech coaches that can help their group. There is a tendency to just allow the students who know how to use the technology to complete the work. As the teacher models the process, the group leaders can model the individual steps for their group. Each group member can then have a turn. This process is often smoother with the grade 2 students than the grade 1 students.

Ensure that there is a back up copy of all images if students are going to import their photos.

Students practice reading the line they want to include as the narrative. As a group they may decide to each read a line, or select to be the voice of different characters in the story etc. This takes practice!

Show and tell time! Perhaps invite another class to the viewing?

Grade 3

Materials: Laminate a large poster board (size)

Washable colours White board eraser

Rulers

Materials for creating their projects (i.e. construction paper, clay etc.)

In grade 3 students should create their own poster boards. Laminate poster boards ahead of time to save time and money.

Ensure that each group member has at least 2 different colored felts. This can serve as an informal way of assessing involvement and progress as students start to work on their individual frames. They can mark on the back of their poster board their name and felt colors.

Pre-teaching (1 class)

For a grade 3 class I would definitely read through a number of stories with different themes. Some teacher prefer to teach students the appropriate vocabulary (i.e. genres, not themes) but this is up to the individual teacher. Although I prefer using the term genre in grade 3 I will continue with theme for the purpose of clarity and consistency.

Read through several short stories, picture books representing a number of different themes. Facilitate a discussion about what students noticed about the different themes (ie. how is an adventure story different than a fairytale?) What did they notice about the pictures that were used?

Depending on the time of year (ie. how familiar students are with narrative, genre etc.) this may even take 2 classes. This can also be done quickly, in approx. 20-30 minutes if students have already worked with fairytales, myths etc.)

Model for students how to create a story that can be divided into individual frames. For instance, consider the following steps:

* Divide the chalk board at the front of the room into key frames large enough for the class to see. Have this already in place on the chalk board before students arrive. A white board or a projector also works well because of the easy use of multiple colors. This depends on what is available in your classroom.

* Retell a fairytale with a twist.

Or, come up with a story as a class. Perhaps you suggest the first sentence, the beginning. Then have the class contribute 8 more sentences (sequences) that will further the story. Keep in mind that you may have to remind them about beginning, middle (rising action), twist, problem, conflict, and end. Ensure to create a copy of the key points for the story for the class to see as they are being created. This is important in order for them to make the connection to storyboarding later on. In Language Arts, the curriculum distinguishes between features of storytelling, storywriting and narrative in grade 1, 2 and 3 are different. It may be helpful to consider this in how you outline and set up criteria for grade 3. Also, please consider this if you are teaching in a grade 2/3 split.

Or, read them a picture book or short story that has a very simple story structure. Ensure the story is not rich in narrative detail or they will try to mimic this in creating their own story. This will not work when they are storyboarding.

The story you model for the class should include approximately 8 key points. Ask students to identify key features of a story. Make a list to keep in the classroom. You can then keep building on this as the year continues.

* Return to the first event and start to discuss with the class what that might look like in a frame. Start to draw out the images as the class continues to tell you what to include. (ie. One day there was a group of friends. They went to school together. They were all scared of the classroom bully. What is a really simple way to illustrate friendship? What does a bully look like? Where are they in the first frame? Is it night or day? Etc.) There are different expectations of narrative and story structure in Kindergarten, grade 1 and grade 2.

Once you have gone through this process with the class they will have a really strong understanding of how to storyboard.

Storyboarding (1 class)

Divide students into groups of 4-5.

Each student will have their own colored marker. This is just to sketch out their storyboard on the laminated poster.

As a group they will come up with a story. They will create a group copy of the key points to their story. This usually also serves as their narrative.

The teacher may want to collect the storyboard and group narrative at the end of class as part of an assessment of the process. The teacher may also assess student progress by consulting with each group near the end of class. In particular, it is very useful for the teacher to read the narratives the students have created before students continue with the next stage. This provides an opportunity for feedback.

* Students should definitely document the narrative they are going to use at this point. Their narrative might be just reading their line from the story, or it might involve sound effects, or character voices. It is important they have a narrative that works at this point because once the practice reading or saying their narrative they may find there are additional elements they want to include in each frame.

Each group member is then responsible for completing at least 2 frames. As long as each group member is responsible for at least two frames, they may divide the rest of the work up according to their strengths/ interests etc.

If time allows:

Once the storyboard is complete, model for students how they might check to see if anything additional is required in any of the frames. This is an additional step for encouraging group work. It works really well, but only if there is time. This step usually takes about 10-15 minutes. The teacher may have to model this process (i.e. what does a constructive suggestion sound like?)

Transfer (1 class)

Have students each create the image from their storyboard with materials provided by the teacher (i.e. clay, leggo etc.) Students may also select to bring materials from home. It is important to remind students that if they are bringing materials or toys from home they have to be willing to share those materials and/or toys with their group. This is more relevant for the younger grades, but may be worth mentioning even in a grade 3 class. For instance if a group decides to use a leggo farmer, then, they have to be willing to share that leggo farmer with the rest of the group. Some characters will have to appear in more than one frame.

Once each frame is ready, each group member can take a picture of their frame. The teacher may select to have group leaders responsible for taking the pictures as long as each group member has been shown how to use the camera. It would then be the responsibility of the group leader to demonstrate for their group how to use the camera. Each group member would have a turn.

It is really important that the teacher has worked with a group of students in advance to ensure that they are comfortable with using the technology. Then as the teacher models the process for the class, there are group tech coaches that can help their group. There is a tendency to just allow the students who know how to use the technology to complete the work. As the teacher models the process, the group leaders can model the individual steps for their group. Each group member can then have a turn.

Ensure that there is a back up copy of all images if students are going to import their photos.

Teaching students to import their images into i-movie or movie-maker will take at least 1 extra class.

Once students have "dumped" their photos of each frame into imove or movie-maker they can record their narrative. It is helpful for students to see the frames as they record their narrative. Otherwise, especially with the younger grades, the timing of their narrative might not match each frame. It is helpful if there is a recorder on the computer.

Students practice reading the line they want to include as the narrative. As a group they may decide to each read a line, or select to be the voice of different characters in the story etc. This takes practice! If there is time, students may want to consider sound effects and/or music.

Sharing slowmation projects! Perhaps invite another class to the viewing?

Grades 4/5

Materials: Laminate 11 by 14 cardboard or regular paper

Washable colours White board eraser

Rulers

Materials for creating their projects (i.e. construction paper, clay etc.)

Students are provided with 11 by 14 cardboard papers for storyboarding. It is still useful to laminate paper because students are often engaged by working on the laminated cardboard. In grades 3/4 I would have this as an option. Some students may prefer to work on regular paper.

Ensure that students have three different colored felts. This can serve as an informal way of assessing involvement and progress as students start to work on their individual frames. They can mark on the back of their group paper (with the storyboard on it) their name and felt colors. It is not recommended that students each fill out individual frames on one big piece of paper to fill out because they tend to want to fill the frame up. This may encourage them to include more than what is necessary in each frame. This then makes the process much longer.

Pre-teaching (1 class)

In a grade 4 / 5 class I would start by reviewing what they know about story structure. It is useful to have this discussion after reading through several short stories. Try to select stories with different themes (ie. genres). Some teachers prefer to teach students the appropriate vocabulary (i.e. genres, not themes) but this is up to the individual teacher. Although I prefer using the term genre in grade 3 I will continue with theme for the purpose of clarity and consistency. What do students notice about character, setting, sequencing of events, conflict and/or problem etc.

Depending on the time of year (ie. how familiar students are with narrative, genre etc.) this may even take 2 classes. This can also be done quickly, in approx. 20-30 minutes if students have already worked with fairytales, myths etc.)

Model for students how to create a story that can be divided into individual frames. For instance, consider the following steps:

- * Divide the chalk board at the front of the room into key frames large enough for the class to see. Have this already in place on the chalk board before students arrive. A white board or a projector also works well because of the easy use of multiple colors. This depends on what is available in your classroom.
- * Retell a fairytale with a twist. Write your own story using students from your class.

Or, come up with a story as a class. Perhaps you suggest the first sentence, the beginning. Then have the class contribute 8 more sentences (sequences) that will further the story. Keep in mind that you may have to remind them about beginning, middle (rising action), twist, problem, conflict, and end. Ensure to create a copy of the key points for the story for the class to see as they are being created. This is important in order for them to make the connection to storyboarding later on. In Language Arts, the curriculum distinguishes between features of storytelling, storywriting and narrative in grades 4 and 5. It may be helpful to consider this in how you outline and set up criteria for a split grade 4/5 class.

Or, read them a picture book or short story that has a very simple story structure. Ensure the story is not rich in narrative detail or they will try to mimic this in creating their own story. This will not work when they are storyboarding.

The story you model for the class should include approximately 8 key points. Ask students to identify key features of a story. Make a list to keep in the classroom. You can then keep building on this as the year continues.

* Return to the first event and start to discuss with the class what that might look like in a frame. Start to draw out the images as the class continues to tell you what to include. (ie. One day there was a group of friends. They went to school together. They were all scared of the classroom bully. What is a really simple way to illustrate friendship? What does a bully look like? Where are they in the first frame? Is it night or day? Etc.) There are different expectations of narrative and story structure in Kindergarten, grade 1 and grade 2.

Once you have gone through this process with the class they will have a really strong understanding of how to storyboard.

Divide students into groups of 4-5.

Each student will have several of their own colored marker. This will be used to storyboard on the paper.

As a group they will come up with a story. They will create a group copy of the key points to their story. This usually also serves as their narrative. At this point students discuss what each frame might look like in relation to the key points of the story.

The teacher may want to collect the storyboard and group narrative at the end of class as part of an assessment of the process. The teacher may also assess student progress by consulting with each group near the end of class. In particular, it is very useful for the teacher to read the narratives the students have created before students continue with the next stage. This provides an opportunity for feedback.

* Students should definitely document the narrative they are going to use at this point. Their narrative might be just reading their line from the story, or it might involve sound effects, or character voices. It is important they have a narrative that works at this point because once the practice reading or saying their narrative they may find there are additional elements they want to include in each frame.

Each group member is then responsible for completing at least 2 frames. As long as each group member is responsible for at least two frames, they may divide the rest of the work up according to their strengths/interests etc.

If time allows:

Once the storyboard is complete, model for students how they might check to see if anything additional is required in any of the frames. This is an additional step for encouraging group work. In grades 4 and 5 it is especially important for students to engage in this process. This step usually takes about 10-15 minutes. The teacher may have to model this process (i.e. what does a constructive suggestion sound like?)

Transfer (1 class)

Have students each create the image from their storyboard with materials provided by the teacher (i.e. clay, leggo etc.) Students may also select to bring materials from home. The creation of their frames has to be completed in one class. This is usually not a problem if their frames are organized ahead of time.

Once each frame is ready, each group member can take a picture of their frame. The teacher may select to have group leaders responsible for taking the pictures as long as each group member has been shown how to use the camera. It would then be the responsibility of the group leader to demonstrate for their group how to use the camera. Each group member would have a turn.

It is really important that the teacher has worked with a group of students in advance to ensure that they are comfortable with using the technology. Then as the teacher models the process for the class, there are group tech coaches that can help their group. There is a tendency to just allow the students who know how to use the technology to complete the work. As the teacher models the process, the group leaders can model the individual steps for their group. Each group member can then have a turn.

Ensure that there is a back up copy of all images if students are going to import their photos.

Teaching students to import their images into i-movie or movie-maker will take at least 1 extra class.

Once students have "dumped" their photos of each frame into imove or movie-maker they can record their narrative. It is helpful for students to see the frames as they record their narrative. Otherwise, especially with the younger grades, the timing of their narrative might not match each frame. It is helpful if there is a recorder on the computer.

Students practice reading the line they want to include as the narrative. As a group they may decide to each read a line, or select to be the voice of different characters in the story etc. This takes practice! If there is time, students may want to consider sound effects and/or music.

Sharing slowmation projects! Perhaps invite another class to the viewing?

Grades 6/7

Materials: Laminate 11 by 14 cardboard or regular paper

Washable colours White board eraser

Rulers

Materials for creating their projects (i.e. construction paper, clay etc.)

Students are provided with 11 by 14 cardboard papers for storyboarding. It is still useful to laminate paper because students are often engaged by working on the laminated cardboard. In grades 6/7 I would have this as an option. Some students may prefer to work on regular paper.

Ensure that students have access to different colored felts. This can serve as an informal way of assessing involvement and progress as students start to work on their individual frames. They can mark on the back of their group paper (with the storyboard on it) their name and felt colors. Another option is just that students sign the frames they complete. Some teachers may select not to assess this step. It is not recommended that students each fill out individual frames on one big piece of paper to fill out because they tend to want to fill the frame up. This may encourage them to include more than what is necessary in each frame. This then makes the process much longer.

Pre-teaching (1 class)

In a grade 6/7 class I would start by reviewing what they know about story structure. It is useful to have this discussion after reading through several short stories. Try to select stories with different themes (ie. genres). Some teachers prefer to teach students the appropriate vocabulary (i.e. genres, not themes) but this is up to the individual teacher. I prefer using the term genre in grades 6/7. However, I will continue with theme for the purpose of clarity and consistency. What do students notice about character, setting, sequencing of events, conflict and/or problem etc.

Depending on the time of year (ie. how familiar students are with narrative, genre etc.) this may even take 2 classes. This can also be done quickly, in approx. 20-30 minutes if students have already worked with fairytales, myths etc.)

Model for students how to create a story that can be divided into individual frames. For instance, consider the following steps:

Divide the chalk board at the front of the room into key frames large enough for the class to see. Have this already in place on the chalk board before students arrive. A white board or a projector also works well because of the easy use of multiple colors. This depends on what is available in your classroom. Another option is to have a demo with storyboarding using long murial paper posted on the walls. This gives students lots of space to work. Students really enjoy this process but can become overwhelmed by the size of the paper.

* Retell a fairytale with a twist. Write your own story using students from your class.

Or, come up with a story as a class. Perhaps you suggest the first sentence, the beginning. Then have the class contribute 10 or more sentences (sequences) that will further the story. Keep in mind that you may have to remind them about beginning, middle (rising action), twist, problem, conflict, and end. Ensure to create a copy of the key points for the story for the class to see as they are being created. This is important in order for them to make the connection to storyboarding later on. In Language Arts, the curriculum distinguishes between features of storytelling, storywriting and narrative in grades 6 and 7. It may be helpful to consider this in how you outline and set up criteria for a split grade 6/7 class.

Or, read them a picture book or short story that has a simple story structure. Ensure the story is not rich in narrative detail or they will try to mimic this in creating their own story. This will not work when they are storyboarding.

The story you model for the class should include approximately 10 key points. Ask students to identify key features of a story. Make a list to keep in the classroom. You can then keep building on this as the year continues.

* Return to the first event and start to discuss with the class what thatmight look like in a frame. Start to draw out the images as the class continues to tell you what to include. (ie. there was once a Great myth about a God who controlled the waters. His name was Poseidon. Etc.) In grades 6 and 7 encourage students to include several sentences of narrative per frame. This places the emphasis on developing ideas as opposed to manipulating the materials per frame. There are different expectations of narrative and story structure in grades 6 and 7. Use the appropriate curriculum as the basis for your introduction to storyboarding.

Once you have gone through this process with the class they will have a really strong understanding of how to storyboard.

Storyboarding (1 class)

Divide students into groups of 4-5.

Each student will have several of their own colored marker. This will be used to storyboard on the paper.

As a group they will come up with a story. They will create a group copy of the key points to their story. This usually also serves as their narrative. At this point students discuss what each frame might look like in relation to the key points of the story.

The teacher may want to collect the storyboard and group narrative at the end of class as part of an assessment of the process. The teacher may also assess student progress by consulting with each group near the end of class. In particular, it is very useful for the teacher to read the narratives the students have created before students continue with the next stage. This provides an opportunity for feedback.

* Students should definitely document the narrative they are going to use at this point. Their narrative might be just reading their line from the story, or it might involve sound effects, or character voices. It is important they have a narrative that works at this point because once the practice reading or saying their narrative they may find there are additional elements they want to include in each frame.

Each group member is then responsible for completing at least 2 frames. As long as each group member is responsible for at least two frames, they may divide the rest of the work up according to their strengths/ interests etc.

If time allows:

Once the storyboard is complete, model for students how they might check to see if anything additional is required in any of the frames. This is an additional step for encouraging group work. In grades 4 and 5 it is especially important for students to engage in this process. This step usually takes about 10-15 minutes. The teacher may have to model this process (i.e. what does a constructive suggestion sound like?)

Transfer (1 class)

Have students each create the image from their storyboard with materials provided by the teacher (i.e. clay, leggo etc.) Students may also select to bring materials from home. The creation of their frames has to be completed in one class. This is usually not a problem if their frames are organized ahead of time.

Once each frame is ready, each group member can take a picture of their frame. The teacher may select to have group leaders responsible for taking the pictures as long as each group member has been shown how to use the camera. It would then be the responsibility of the group leader to demonstrate for their group how to use the camera. Each group member would have a turn.

It is really important that the teacher has worked with a group of students in advance to ensure that they are comfortable with using the technology. Then as the teacher models the process for the class, there are group tech coaches that can help their group. There is a tendency to just allow the students who know how to use the technology to complete the work. As the teacher models the process, the group leaders can model the individual steps for their group. Each group member can then have a turn.

Ensure that there is a back up copy of all images if students are going to import their photos.

Teaching students to import their images into i-movie or movie-maker will take at least 1 extra class.

Once students have "dumped" their photos of each frame into imove or movie-maker they can record their narrative. It is helpful for students to see the frames as they record their narrative. Otherwise, especially with the younger grades, the timing of their narrative might not match each frame. It is helpful if there is a recorder on the computer.

Students practice reading the line they want to include as the narrative. As a group they may decide to each read a line, or select to be the voice of different characters in the story etc. This takes practice! If there is time, students may want to consider sound effects and/or music.

Sharing slowmation projects! Perhaps invite another class to the viewing?

Slowmation Lesson #1 (Designing)

by Christine Thompson (University of Wollongong)

In this example Slowmation was taught in two lessons to year 5.6 class. The first lesson focused on designing and the second lesson on making. The teacher then used the children's photos to make the slowmation

Year: 5/6	Theme: Rockets and Storyboarding
	Intended Outcome and indicator: IC S3.2: Creates and evaluates information products and processes, demonstrating consideration of type of media, form, audience and ethical issues. • works collaboratively to develop a storyboard and a multimedia presentation of a Claymation.
Content	Strategies
Opening: (25 mins) Previous knowledge.	 Whole class brainstorm: What is animation? How were animations originally created? Show the students the flip book illustrating how a series of images can create the illusion of movement.
How Claymations and 'Slowmations' are created	 Whole class brainstorm: What is a Claymation? Now based on what we know about animation how do you think claymations are created? What are some famous claymation movies? (Wallace and Grommet, Chicken Run, Harvie Krumpet). "Now just to give you an idea about the work involved in creating a professional claymation, it took the creator of Harvie Krumpet 14 months to create a movie that only runs for 23 minutes. Now this is amazing how many photos approximately do you think he needed to take to create a 23 minute movie? [let the children guess]. The answer is approximately 33,000 pictures!"
Introduce the activity	 Communicate the differences between a 'Claymation' and 'Slowmation' Both are forms of animation but are created differently. With a claymation, the characters and setting are created with clay whereas with a 'Slowmation' the characters and setting are created with Play-doh (if accessible, hand some clay and play-doh around to identify the difference). In a claymation the characters and setting are created to stand up on there own whereas with a 'Slowmation', as we are using softer material the characters and setting are created to lay flat on cardboard (model it). In a claymation the photos are taken front on (model it) whereas with a 'Slowmation' as the characters are flat on the cardboard, the photos are taken from

above (model it)."

Model the task

- Use a laptop to play the example 'Slowmation'
- Explain the process you went through:
 - 1. Learnt about the science as a class and separated the process into small stages.
 - 2. The whole class separated into groups of four and were in charge of one stage.
 - **3.** Each group designed a storyboard for their stage.
 - **4.** In these same groups we worked together to create our characters and setting using play-doh the next day and then we took the photos that day as well.
 - **5.** Then after that, the teacher put the photos onto a computer program called Quicktime Pro and made it into a movie.

Brainstorm and discuss the science

How does a space shuttle get from earth to space and what happens along the way?

The space shuttle launch and landing process.

A space shuttle consists of 3 components (Draw it on the board).

- 1. The orbiter which carries the astronauts and has three engines,
- 2. Two solid rocket boosters which are critical for the launch and
- **3.** External fuel tank which carries the fuel for the launch

Now the launch happens over four stages: (draw this progressively on the board).

- 1. The space shuttle is attached to a tower and the computers control the lift off by starting the main engines which are attached to the orbiter, now these engines do not produce enough thrust for the shuttle to lift off so the computer then ignites the solid rocket boosters which forces the rocket off the ground and away from the tower.
- 2. The space shuttle then shoots higher and higher but before it breaks through the earth's atmosphere the solid rocket boosters detach from the orbiter and fuel tank while the main engines keep firing. These solid rocket boosters are detatched because once they are ignited they cannot actually be shut down. After they detatch parachutes shoot out from the rockets so that they gradually float back to earth where they land in the water and are later collected by ships sent to get them. Then they reuse them.
- 3. Then the shuttle shoots through the earth's atmosphere and the main engines are slowed down and then the external fuel tank is detached because we no longer need its power because we're through the earth's atmosphere which is the hardest part. Now after the external fuel tank detaches itself, it falls back to earth but doesn't actually reach the earth's surface as it hits the Earth's atmosphere and disintegrates.
- **4.** The shuttle's engines then fire placing you in orbit or outer space. It flies upside down. Now a typical space mission usually lasts between 7 and 8 days however it can last as long as 14 days depending on the mission. Now in order for the shuttle to safely arrive back in earth it must first slow down. They do this by firing these special thrusters which turns the orbiter around 180 degrees like this (model it) and then they fire more thrusters which flip it over so that they are moving nose

first again.

5. Then once the orbiter reaches the earth's atmosphere it can be flown like an airplane (not an aeroplane because its no longer using rockets), it flies like an air plane which works like a glider. Now at this point the computers control the orbiter and they make it do a series of 'S' turns to slow it down then once its done that the computer gives up controls to the commander and he glides it to the runway. Once it hits the runway a parachute shoots out the back and slows it to a stop.

Body: (*50 mins*)

Formulating the idea and sequence of the shuttle taking off.

Split the children into groups of four and designate stages by picking a number out of a hat. Go through what each person needs to create in their stage and designate roles by again picking a number out of a hat. (Give each group the 'Group Roles', 'Storyboard', 'Props' and 'Background' stencil).

Revise the stages and explicitly communicate the content for each stage to the whole class making sure each group understands what they are doing.

- 1. What happens? Astronauts getting on the shuttle and the shuttle lifting off from the tower. What do we need to make? Orbiter, two solid rocket boosters, an external fuel tank, tower, astronauts and fire. Maybe some grass etc (give it an earth scene).
- 2. What happens? The shuttle shoots high, the two solid rocket boosters detatch and they fall to the earth and parachutes shoot out. What do we need to make? Orbiter, two solid rocket boosters, an external fuel tank, parachutes and maybe the earths atmosphere (a curved line) with clouds under it to show that it hasn't reached space yet.
- 3. What happens? The shuttle shoots through the earth's atmosphere and the external fuel tank is detached and falls to the earth's atmosphere where it disintegrates. What do we need to make? Orbiter, external fuel tank, earths atmosphere (a curved line) and fire for when it disintegrates, space scene (planets, stars, comets etc).
- 4. What happens? [they have to make the shuttle from a different point of view, we'll need to make the whole thing and then cut it in half] The shuttle flies upside down, turns around and then flips over and heads towards the earths atmosphere. What do we need to make? An orbiter which will need to be cut in half, fire for the engines, the earths atmosphere (a curved line) and a space scene (planets, stars, comets etc).
- 5. **What happens?** The orbiter re-enters the earths atmosphere, glides in an S turn and then glides to the runway where it lands and a parachute shoots out the back and eventually stops it. **What do we need to make?** Orbiter, an earth scene (clouds, birds), the earths atmosphere line above, a runway and a parachute.

Discuss the colours of the space shuttle: Students vote.

Communicate positive expectations:

	Let's have Fun!
Conclusion: (15 mins)	Each group shares their background, props and storyboard drawings (share in sequence)
Materials:	 Laptop and example Storyboard, scene and props stencils

Slowmation Lesson #2 (Making)

By Christine Thompson (University of Wollongong)

Year: 5/6	Theme: Making the rocket Claymation
	Intended Outcome and indicator: IC S3.2: Creates and evaluates information products and processes, demonstrating consideration of type of media, form, audience and ethical issues. • works collaboratively to develop a storyboard and a multimedia presentation of a Claymation.
Content	Strategies
Opening: (15 mins) Give instructions for the activity.	 Communicate Each group will have a piece of white or black cardboard to use as their background. The number one, two, five and 'titles' groups will have white cardboard as they have an earth setting and groups three and four will have the black cardboard because their setting is in space. Now you already know what's going to happen in your stage because you've done the storyboard so when I say you can start, you need to do the following things (write the basic instructions on the board): Find a place on the floor to work. Now we need to work from the floor so that the filming is easier because we need to shoot it from above. Decide what colours you need and wait patiently. Once you find a place the whole group needs to figure out what colour play-doh you will need and then when you're sitting patiently I will allow ONE group at a time to come up the front to collect it. Now there is not a lot to go around so only take what you need. Don't be greedy, if you take all the purple the rest of the claymation won't look as good. It's a group effort. We want the WHOLE THING to look good in the end. Take the play-doh back to your floor space and make the scene and props. Follow your story board and get the scene and props ready for the first photo to be taken.
	Revise Model the process by making a simple character in separation from the cardboard and then place the character onto the cardboard, pretend to take a photo, move the character, pretend to take another photo etc. Communicate Now I want to see everyone involved. You've got your group roles to make sure everything gets done but of course you are encouraged to help each other (hand our the 'group roles' sheet just in case they've forgotten). Now we've only got the one camera and we need to take the photos in sequence so the 'titles' group need to go first, followed

Opening:

(15 mins)

Give instructions for the activity.

Communicate

Each group will have a piece of white or black cardboard to use as their background. The number one, two, five and 'titles' groups will have white cardboard as they have an earth setting and groups three and four will have the black cardboard because their setting is in space. Now you already know what's going to happen in your stage because you've done the storyboard so when I say you can start, you need to do the following things (write the basic instructions on the board):

- 1. Find a place on the floor to work. Now we need to work from the floor so that the filming is easier because we need to shoot it from above.
- 2. Decide what colours you need and wait patiently. Once you find a place the whole group needs to figure out what colour play-doh you will need and then when you're sitting patiently I will allow ONE group at a time to come up the front to collect it. Now there is not a lot to go around so only take what you need. Don't be greedy, if you take all the purple the rest of the claymation won't look as good. It's a group effort. We want the WHOLE THING to look good in the end.
- 3. Take the play-doh back to your floor space and make the scene and props.
- **4.** Follow your story board and get the scene and props ready for the first photo to be taken.

Revise

Model the process by making a simple character in separation from the cardboard and then place the character onto the cardboard, pretend to take a photo, move the character, pretend to take another photo etc.

Communicate

Now I want to see everyone involved. You've got your group roles to make sure everything gets done but of course you are encouraged to help each other (hand our the 'group roles' sheet just in case they've forgotten). Now we've only got the one camera and we need to take the photos in sequence so the 'titles' group need to go first, followed by group 1 then group 2 etc. so you need to be ready when its your group's turn to take the photos. Now within your group roles two people are in charge of moving the characters and two are in charge of the camera but as this is an expensive piece of equipment I will be helping you through this process.

Body:

(30 minutes for the making process and 30

Students work collaboratively to create the Slowmation:

- 1. Follow their storyboard and group roles by creating the scene and props.
- 2. Use the camera and tripod to take fifteen photos.
- 3. Children return the Plasticine to its original container.
- **4.** Teacher transfers the photos onto a flash drive and loads the photos onto a laptop.