

Connecting Learning at Home and at School

Involving family members in homework
activities

Case Study – Yea High School

Background

Yea High School is a co-educational secondary college of 350 students, situated 100 kilometres North-East of Melbourne. It provides for the educational needs of a mixture of rural and semi-rural communities and is committed to working in partnership with families. The school believes that families and the school working as partners will increase student achievement and help students develop positive attitudes towards their education.

Situation

As part of our curriculum in Years 7 and 8 students receive Interactive Home Learning (IHL) tasks at regular intervals over a semester. Two samples of these tasks are included at the bottom of the document. IHL tasks require students to conduct conversations with a parent or family partner to involve them in certain parts of the student's learning. IHL tasks are printed on both sides of one sheet of coloured paper and will have a home to school communication component.

What did you do?

We employed a seven-step process to develop the Yea High School IHL Program.

1. Select the subjects for IHL program. Learning domains discuss the subjects and year levels for which these tasks will be used.
2. Select skills for bimonthly IHL assignments. The team of teachers that work on IHL tasks consider the sequence of skills that are taught in each unit throughout the school year. Teachers identify one skill or learning objective each week or every other week that lends itself to enjoyable and useful student-family interactions. These are the topics for the IHL assignments.
3. Adapt and develop IHL tasks to match the curriculum. Teachers work in teams to develop IHL tasks appropriate to their subject and year level.
4. Orient students and families to the IHL process. Teachers must explain the IHL processes and purposes to students and their parents or other family partners. This is done through letters to parents, presentations to parent meetings, face to face discussions, newsletters and via our website.
5. Assign IHL tasks on a regular, family-friendly schedule. Teachers assign IHL tasks every other week. Teachers will give students several days or a weekend to complete each task to allow students time to work with a family partner.
6. Evaluate student work and respond to family questions. Teachers correct and comment on IHL tasks as they would any other task. Teachers also respond to the family feedback in the Home-to-School Communication section to encourage open channels of communication about students' needs and progress.
7. Revise and improve activities as needed. Teachers note any problems with particular sections of tasks throughout the year and revise tasks or develop new tasks as needed.

Teachers, students, parents and administrators all have responsibilities for the success of IHL.

- Teachers design the home learning tasks, orient parents to the process, explain IHL and family engagement to students, conduct follow-up activities in class and maintain records.
- Students complete the IHL tasks and involve their family as directed in the activities.
- Families learn about the IHL process, set aside time every other week to discuss IHL tasks with their children and complete the home-to-school communications.
- Principals and senior staff assist teachers, introduce families to the program and support and recognise teachers, students and families who use IHL well.



Results

We have built students' confidence by requiring them to interact with family members by:

- showing their work
- sharing ideas
- interviewing
- discussing
- demonstrating
- presenting.

We have also:

- linked schoolwork with real-life situations
- assisted parents to understand more of what their children are learning at school
- encouraged parents and children to talk regularly about schoolwork and progress
- enabled parents and teachers to frequently communicate regarding children's work, progress and concerns.

Sample interactive home learning tasks

SAMPLE 1 Yea High School Year 7 Science Home Learning

Student Name _____ Date _____

Dear Family Partner

In Science, we have been making and testing slime. This activity focuses on liquids to help build skills in observing, recording and drawing conclusions. I hope you enjoy this activity.
This activity is due Wednesday 28th February

OBJECTIVE

To understand viscosity – a liquids resistance to flow

MATERIALS

ONE TEASPOON of four liquids that have different thicknesses such as tomato sauce, milk, honey, golden syrup, ice-cream topping, water or others that your family partner will allow you to use.

Also, baking tray, teaspoon, clock with second hand or count seconds.

PROCEDURE

1. Some liquids are thicker and more viscous than others. They flow slowly.
Some liquids are thin and less viscous than others. They flow quickly.

2. With your family partner, decide: Which four liquids to test?

a) _____

b) _____

c) _____

d) _____

3. Tilt the baking tray and lean it up against something like a brick or large (fat) book so that it is at an angle (between 45° – 60°). At about what angle is your tray tilted? _____

One of you will put each liquid in the pan and identify the finish line. The other will serve as the timer. You may check each other to get an accurate observation.

Start EACH teaspoon of a new liquid at the same level at the top of the tray at least 2cms away (sideways) from the previous liquid. Make sure that the tray remains tilted at the same angle for each test.

When you are ready with all of the materials, do these steps:

- a. Place one teaspoon of the liquid at the top of your tray.
- b. Time the seconds it takes for the liquid to reach the finish line at the bottom of the pan.
- c. RECORD the data on the data chart over the page.
- d. Continue until you have tested all FOUR liquids.

DATA CHART

| LIQUID | SECONDS TO FINISH LINE | OBSERVATION HOW VISCOUS IS IT? |
|--------|---------------------------|-----------------------------------|
| | | |
| | | |
| | | |
| | | |

CONCLUSIONS

1. Which liquid finished
a) first (fastest) _____ b) last (slowest) _____
2. Which liquid (or liquids) have high viscosity? _____
3. Which liquids (or liquids) have low viscosity? _____
4. Why was it important that your pan remained at the same angle for each test?

FAMILY SURVEY

ASK – Can you think of any foods or other products around the home (in bathroom, garage, laundry, etc) that might have high or low viscosity. List some of your ideas below.

Name some likely fluids found around the house with high viscosity (slow flow).

Name some likely fluids found around the house with low viscosity (fast flow)?

HOME TO SCHOOL COMMUNICATION

Dear Family Partner

Please give you reactions to your child's learning on this activity. Write YES or NO for each of the following statements.

- _____ 1. My child understood the homework and was able to complete it.
- _____ 2. My child and I enjoyed the activity.
- _____ 3. This task helped me know more about the content and skills my child is learning in Science.

Any other comments:

Family Partner signature _____

Student signature _____

SAMPLE 2 Yea High School Year 7 Science Home Learning

Student Name _____ Date Friday 9th March

Dear Family Partner

In Science, we have been practising making observations using all our senses. This activity focuses on recording observations made during the changes that occur when something is cooked. I hope you enjoy this activity. This activity is due Friday 16th March.

OBJECTIVE

To practise making and recording observations whilst cooking pancakes, drop scones, cakes, biscuits, toasted sandwich, etc
A couple of recipes are attached but you might want to use your own.
It could even be two minute noodles

MATERIALS

Whatever the recipe requires. Be sure it is something your family partner is happy for you to cook!

PROCEDURE

1. Decide what is that you are going to make with your family partner and collect all the ingredients and necessary equipment. I am making _____
2. Record your observations, using ALL your senses, at each stage of the cooking process i.e. smell, taste, hearing, sight and touch (texture) such as A) the raw materials on their own B) the mixture and C) the finished product in the table provided.

Do just for the main ingredients such as flour, egg, milk, butter, mixture and finished Pancake.

DATA CHART

| MATERIALS | OBSERVATIONS Remember that you have five different senses! |
|-----------|---|
| | |
| | |
| | |
| | |
| | |
| | |

CONCLUSIONS

5. Is the finished product very different from the raw materials? If so list TWO ways.

- a. _____
- b. _____

6. Which sense do you think is most important in cooking? Give one reason why?

FAMILY SURVEY

ASK – Can you think of TWO different situations in and around the home (include garden and garage/shed etc) where making an observation could lead to a family member being safer).

List the situation and the sense used (i.e. sight, smell etc) that led to the home being safer for having made the observation.

E.G. Noticing with your sight that the car is leaking oil on the concrete; leads to car being serviced to fix the oil leak, making car safer.

1) _____

2) _____

HOME TO SCHOOL COMMUNICATION

Dear Family Partner

Please give you reactions to your child's learning on this activity. Write YES or NO for each of the following statements.

- _____ 1. My child understood the homework and was able to complete it.
- _____ 2. My child and I enjoyed the activity.
- _____ 3. This task helped me know what my child is learning in Science.

Any other comments

Family Partner signature _____ Student signature _____

Yea High School

Year 7 Science Home Learning Tasks 2007

The following feedback was received by the school in response to two home learning activities. This feedback was from the families of young people at the school.

Home Learner Comments Task 1: Viscosity

- I enjoyed the activity
- My child and I did not enjoy the activity
- The whole family were involved in this experiment
- A good exercise
- It was easy and informative
- Good to see what she is doing
- It was a lot of fun spending time with (*name*) (A comment from learning partner).
- The experiment was interesting
- We had fun with this task
- (*Name*) did this exercise well apart from leaving it to the last night. I constantly ask if she has homework and her reply is "No, I've done it at school", then she brings it home the day before it's due. I was disappointed with her telling me this! (comment from Mum).

Home Learner Comments Task 2: Observations (home cooking)

- This was a great way to do homework, simple and non threatening
- Delicious
- (*Name*) needs to present tasks early so they are not going to be done at the last minute
- I have already been to school and completed a lot of homework apart from the above, we help (*name*) in most aspects of his homework, as he can attest
- We all enjoyed eating the final product
- (*Name's*) family partner was his sister.