Unit name: How can I reach my peak performance?

Student Year level/EAL Stage/s: Level 5/6, Stage B3

This unit was written for a Year 5/6 class.

Class description: The Year 5/6 class consisted of 27 students. Eighty per cent of students came from a non-English speaking background, most of these being Vietnamese, South Sudanese and Filipino. The majority of the students were assessed as being at standard across the Australian Curriculum but there was a small group of 8 students assessed on the Victorian 'EAL Developmental Continuum P–10' at stage B3 for Speaking and Listening, Reading and Writing. All students participated in the whole class focus activities, with the EAL students participating in additional small focus groups with the classroom teacher and Literacy Leader.

The EAL students chosen area of interest was nutrition. The explanation key text chosen by the teacher was on the Digestive System. Knowing the function of the digestive system was crucial for the students to understand the affect different foods can have on the body. To be able to successfully present an oral explanation on the digestive system to their peers, the EAL focus group participated in additional teaching sessions with the Literacy Leader, using visual and audio-visual materials to build understanding of the Digestive System. This also reinforced the correct structure and grammatical features of an explanation text.

## Victorian curriculum/content links:

The Year 5/6 Term 2 Inquiry unit centred around the rich question, "How can I reach my peak performance?" and was based upon the concept of health. This unit was created within the context of the students' participation in inter-school sports during the term. The particular group possessed great athletic ability and were very interested in improving their own or others' athletic strengths. Through the unit, the students explored the different systems that make up the human body and how their choices could affect these, thus addressing learning from the Science, Health and Physical Education domains of VELS. Such learning also addressed the Thinking Processes and Personal Learning domains.

After the 'tuning in' stage, the students chose an area of health they were most interested in, and then split into three groups: physical fitness, mental fitness and nutrition. They completed a variety of activities in order to reflect and assess their current physical, mental and nutritional health and investigated the various factors that could affect their achievement of health goals. During the 'Action' component of the unit, the students were required to use researched information to explain to an audience, in both oral and written formats, how a particular body system works and how others can make good choices to reach their own performance peak.

Main genre focus: At completion of the unit students were required to demonstrate their understanding of a body system by presenting a digital explanation text to an audience, using technology.

Collaboration with other teachers: At this school, the classroom teacher and Literacy Leader support the EAL students in the mainstream. A Backward Mapping example text was created by the team of Year 5/6 teachers, which specifically identified the linguistic features and structures of an explanation text. This key mentor text created was an explanation text about how the digestive system works (Appendix 1), which was written by the grade 5/6 teachers by adapting a text titled 'Where does food go?' by Durkin, Ferguson and Sperring (2006). This text type clearly linked with the VELS Science and Health domains and provided a model for the students to use when writing and orally delivering their own explanations of their chosen bodily system.

### UNDERSTANDINGS

- We need to make good food choices in order for our body to perform at its peak
- Our body is made up of different systems that are connected and have specific roles.
- We can become fit by strengthening our musculoskeletal, cardio-vascular and respiratory systems
- Our food choices impact the function of our digestive system

We need to strengthen our mind in order to perform at our peak						
	Links to Vio	torian Curriculum				
Physical, personal	and social learning		Inter-d	isciplinary Strand		
<ul> <li>Health and Physical Education         Movement and Physical Activity         ► Setting personal goals to improve performance, and explore strategies to achieve them.         ► Explaining the process for improving health-related fitness.         ► Working independently to improve performance based on performance criteria         ► Effectively using strategic thinking to improve game performance.     </li> <li>Health Knowledge and Promotion</li> <li>► Analyzing and explaining food choices.</li> </ul>	Personal Learning  Managing Personal Learning  Monitoring and describing progress in their learning.  Negotiating learning improvement goals  Justifying the choices, they make about their own learning.	Civics and Citizen Community engagement Corganisation of activities and participation in those activities with teacher support	Presenting  Experimenting with ways to impro communication; for example, projudice to be heard clearly and making that the audience can see any visu	ecting investigation.  ng sure al aids. e of Metacognition rriculum Use a broad range of thinking		
	Disciplin	e-based Strand				
<ul> <li>Speaking and Listening</li> <li>Plan, rehearse and make presentations for different purposes.</li> <li>Adjust their speaking to take account of context, purpose and audience, and vary tone, volume and pace of speech to create or emphasize meaning.</li> <li>When listening to spoken texts, they identify the main idea and supporting details and summarise them for others.</li> </ul>	Writing     Produce, in print and electronic form variety of texts for different purpose structures and features of language appropriate to the purpose, audience context of the writing.     Use a range of vocabulary, a variety sentence structures, and use punctuaccurately.     Identify and use different parts of specific parts.	es using literal mult read and with of purp read literal literal mult read and literal literal mult read and literal mult read and literal literal mult read and literal mult re	d, interpret and respond to a wide range of ary, every day and media texts in print and in timodal formats.  Tyse these texts and support interpretations evidence drawn from the text.  The ribe how texts are constructed for particular coses and audiences.  Strategies such as drawing on knowledge of organisation when interpreting texts	Science Science knowledge and understanding  ► Identify and explain the connections between systems in the human body and their various functions.  Science at work  ► Use diagrams and symbols to explain procedures used when reporting on investigations.  ► Use the terms relationships and cause		

containing unfamiliar ideas and information.

including nouns, pronouns, adverbs,

use appropriate prepositions and

conjunctions.

comparative adverbs and adjectives, and

and effect when discussing and drawing

conclusions from the data they collect.

## Specific EAL learning needs to be covered in this unit: Adapted from Stage B3 Victorian EAL Developmental Continuum P-10.

## **Speaking and Listening**

- Orally explaining and recalling complex ideas about academic content.
- Providing relevant and appropriate detail when discussing new ideas.
- Sequencing and linking processes when delivering an oral explanation.
- Providing sequence markers, such as first, next, finally, when explaining how a body system functions.
- Comprehending complex ideas presenting through spoken language (such as spoken texts without illustrations, group conversations and digital clips about the human body).
- Pronouncing polysyllabic words, such as oesophagus, musculoskeletal, etc
- Planning, rehearsing and orally presenting an explanation of how a body system functions.

## Reading

- Recalling and summarising the main ideas from factual texts associated with the unit.
- Identifying the sequences in explanations and how these can be signified using temporal connectives.
- Recognising how ideas can be related and understanding how cause and effect can be shown through the use of conjunctions.
- Comprehending the meaning of complex sentence patterns, particularly when researching independently.
- Understanding and using the appropriate metalanguage to describe the structure and features of the text types associated with the unit.

## Writing

- Including information from different sources to produce pieces of writing related to the Inquiry topic.
- Using appropriate conjunctions to connect the sequences and stages of a body function.
- Using extended noun groups to describe body parts and functions.

Years: 5 & 6 Unit name: 'How Can I Reach My Peak Performance? Time allocation: 1 Term Level 5/6 EAL Stage/s B3 Victorian curriculum/content objectives Main text focus Develop the understanding that Text-type and Listened to Spoken Read Written Viewed Produced **Topic focus** We need to make good food choices in order for our body to perform at its peak mode Our body is made up of different systems that are connected and have specific roles. Narrative We can become fit by strengthening our musculoskeletal, cardio-vascular and respiratory systems Other people can have an effect on how we achieve our fitness goals Recount Procedure Topic specific vocabulary Linguistic structure focus Report digestive system, energy, saliva, oesophagus, particles, intestine, Text type: Explanation  $\sqrt{}$  $\sqrt{}$ Explanation substances, nutrients, expel, contract, relax, absorb, explain, Social purpose/genre: To explain to an audience how stored, as a consequence, resulting in, leads to, causing, sequence, or why something happens as clearly as possible. Discussion step, action. Structure: Argument/ Title: (describes what is being explained exposition General Statement: (introduces the topic) Assessment types used Body of the text: (explanation in sequential order) Conclusion: (sums up the process) Other: Self and peer Teacher led Informal observation Self-reflection Planned observation Peer discussion Grammatical features focus **Functions**  Questioning/discussion Peer observation Classroom learning Getting things done Maintaining communication Temporal connectives to introduce steps in the Focused analysis of student arguing comparing Expressing: process: first, next, finally work classifying clarifying apology Causal conjunctions to signify cause and effect: Resources establishing limits describing processes appreciation as a result, as a consequence, resulting in Durkin, P., Ferguson, V., Sperring, G. (2006). Text Types 5 For and change evaluating approval Primary Schools. South Melbourne: Oxford University Press. Action verbs to explain the processes of the explaining cause and hypothesising certainty Fin, K. (1997). How your body works. Woodbridge, Suffolk: Penguin. digestive system: crushed, mixed, churned, effect identifying concern Harris, N., & Aston, C. (2002). Look Closer at the Human Body. stored, contract instructing judging frustration New South Wales: Orpheus Books. Pronouns: us, we, it, our inquiring offering indifference Keaney, C. 2000. Body Systems. New South Wales: Black Dog Simple present tense: is, need, become justifying persuading intention Books. Adverbial circumstances of time, manner and auestioning needs/wants planning Preddey, V. (1999). The Human Body. New South Wales: place: in the stomach, until it is mushy reporting predicting preferences Scholastic. New paragraph for each step in the process suggesting requesting probability Digital texts-The Digestive System: sequencing regret http://kidshealth.org/kid/htbw/ bfs DSmoviesource.html warning http://www.youtube.com/watch?v=KO9HVg8NRo0

# Level 5/6/Stages B2/B3: Ideas for activities

These activity suggestions are linked to the aspects of language in the EAL Developmental Continuum at Stages B2 and B3. The shaded activities types are included in this unit.

Speaking and listening	Reading	Writing
Text Interact in a variety of social and learning situations to present ideas and information and to talk about events: • respond to the points of view of others and give own ideas • take various roles in small-group discussion • summarise issues arising from discussion or reading • talk about the way speech can be used to entertain, inform and influence.	Text To read and view both factual and fictional texts for information, research and enjoyment:  • take part in the critical evaluation and interpretation of literature texts  • read and research a variety of texts, including reference books, the Internet, CD-ROMs, newspapers and other everyday texts  • obtain information from diagrams, maps, plans, graphs, etc.	Text Write to develop familiar ideas, describe events and present information:  • write a range of factual texts to fulfill particular purposes  • write a range of fictional texts to fulfill particular purposes  • give information in graphic form, e.g. maps, diagrams, graphs  • give information through posters, captions, tables, etc.  • share and talk about their own writing.
Consider aspects of context, purpose and audience when speaking and listening:  • talk about the aspects of spoken texts that can be used to influence others  • consider how non-verbal language affects verbal interaction  • talk about how people change the way they speak depending on their audience.  Linguistic structures and features  Control most structures and features of spoken English to interpret meaning and develop and present ideas and information in familiar situations:  • take part in small- and large-group discussions  • prepare spoken texts for presentation, taking into consideration aspects such as vocabulary selection, non-verbal cues and styles of delivery.	Contextual understanding Interpret and explain varying interpretations of texts:  • talk or write about characterisation and stereotyping in texts  • identify evidence in texts to support different points of view  • talk about and give reasons for different opinions about the meaning of a text  • explain why texts are presented in different formats and talk about how this helps the reader to understand.  Linguistic structures and features  Discuss how structures and features  Discuss how structures and features shape the understanding and interpretation of a text:  • talk about the purposes of the organisational elements of a text, and use them to access information, e.g. contents page, index, glossary  • recognise elements that contribute to text cohesion, e.g. topic sentences, cohesive features  • categorise texts by their characteristics, e.g. mystery, biography, poem, documentary.	Contextual understanding  Adjust writing to take account of aspects of context, purpose and audience:  • consider the needs of the audience when planning and writing  • discuss the importance of vocabulary choice and writing style when writing for different audiences  • talk about the most purposeful and useful ways of presenting information, e.g. a table, a graph, written text.  Linguistic structures and features  Use the distinguishing structures and features of common text-types:  • compare and evaluate texts written for a particular purpose  • use and talk about the features of texts that assist the reader, e.g. vocabulary choice, punctuation  • talk about how particular features of grammar are characteristic of particular text-types  • use and talk about text organisation that assist the reader, e.g. paragraphing, headings, indexes
Strategies Reflect on, use and evaluate effective oral communication strategies:  evaluate the speech of themselves and others, in response to known criteria  talk about and practise the strategies that enhance interaction in small groups  discuss the strategies that different speakers use to influence their audience  talk about the need to change spoken interaction according to the needs of the audience.	Strategies Use a wide range of strategies for reading and accessing information from different texts:  • talk about different strategies for accessing challenging texts and reading for different purposes  • plan research topics and develop focus questions  • take notes when reading and viewing  • identify and locate appropriate information and present for different audiences.	Strategies Use the distinguishing structures and features of common text-types:  • use and talk about how text features assist the reader, e.g. vocabulary choice, punctuation  • talk about how particular features of grammar are characteristic of particular text-types  • use and talk about how text structures assist the reader, e.g. paragraphing, headings, indexes  • use diagrams, captions, layout to present information in a text, for effect and to assist the reader.

Teaching and learning activities	Linguistic focus	Assessment for learning ideas
N.B. Only a selection of the many teaching and learning activities the		Unit learning intentions
students engaged in are included in this unit. This unit of work focuses mostly on the learning and teaching that occurred during whole class and small group EAL literacy sessions.		List and discuss the learning intentions and success criteria of the unit with the students to ensure they know what they are aiming to achieve throughout the unit.
Whole Class		Success criteria
Present to students learning intentions for the unit and discuss them.		English Students will:
The aim of this unit is to assist students to begin to understand:		<ul> <li>Prepare and present a digital explanation text, explaining how a body system works using technology, to peers</li> </ul>
Science/Health/Physical Education		Independently write an explanation text.
We need to make good food choices in order for our body to		EAL students will:
perform at its peak		Speaking and Listening
<ul> <li>Our body is made up of different systems that are connected and have specific roles.</li> </ul>		<ul> <li>Orally explain and record a digital text using IT and software (Garage band) to explain how the digestive system works to a Year 5-6 audience.</li> </ul>
We can become fit by strengthening our musculoskeletal, cardio-vascular and respiratory systems		Text will contain:
Other people can have an effect on how we achieve our fitness goals		<ul> <li>Appropriate text structure</li> <li>A range of connectives to sequence ideas and conjunctions showing cause and effect</li> </ul>
		Reading
		<ul> <li>Listen to and read a range of factual texts about the human body in order to gain information and summarise ideas to sufficiently comprehend the function of the digestive system</li> </ul>
		<ul> <li>Listen to and read key explanation texts in which students can understand, discuss and make connections between the purpose and audience, text structure, the sequence of steps and language used to explain a phenomenon to the reader</li> </ul>
		Writing
		Write an explanation text which includes:
		<ul> <li>The appropriate explanation text structure</li> <li>A new paragraph to introduce the next step in the sequence of steps in the explanation</li> <li>Appropriate scientific language, including action verbs, to explain the process</li> </ul>

### **Building the field: Teaching and learning activities Linguistic focus Assessment for learning ideas** Whole Class **Functions** Observation Building scientific content about digestive system Teacher observes how students group the food Classifying food items into categories **Lunchbox Bundling Activity** items and justify their classifications. Justifying why foods have been grouped into Students in groups empty their lunch boxes and together group the food items particular categories according to their own categories Linguistic features Students **justify** why they have grouped items in particular ways. e.g. healthy food, junk food, liquid food, solid food, fruit by colour etc Common nouns Apple, fruit juice, yoghurt, banana, chips, noodles, seaweed, rice, chicken, dairy, bread, crackers, cheese, etc. Classifying adjectives Solid, hard, soft, liquid, healthy, orange, crunchy, good, bad, sweet, savoury, round, flat. Complex sentence with a Subordinating connective (causal) e.g. The apple juice and the yoghurt go together because they both have fruit. Whole Class Modals to express possibility or probability Observation Listening to, reading and viewing range of texts to tune students into topic e.g. I think the food might... Teacher listens for students' prior knowledge Students shown a diagram of the human body (that shows the digestive system) on the digestive system and their use of time Time connectives to signify sequence and they predict where their food goes once it has been swallowed. connectives to signify the sequence. e.g. First the food might. Then it... Read factual text, 'How your body works', with a particular focus on the labelled diagram of the digestive system (Figure 1). Use of technical nouns and action verbs Questioning: Teacher explicitly models how the numbers, pictures and descriptions work \*digestion \*oesophagus \*liquids \*saliva \*tube \*large together to give the reader information. Teacher ask questions to check students' intestine \*small intestine \*coils \*absorbed \*expands Figure 1 Fin, K. (1997). How your body works. Woodbridge, Suffolk: Penguin. understanding of visual text. \*contract \*churn Food is filtered fo STOMACH small pieces SMALL INTESTIN Water is reabsorbed BLOOD Liquid food travels t

Commence a word wall of new vocabulary students have learnt.

Duilding the field. Too shing and looming a stirities	Linguistic forms	Accessed the learning in the second
Whole Class Students shown the labelled diagram of the digestive system (text above), with the labels covered so all is shown is the image. Names of the different body parts displayed randomly for students.  • Working with a partner, students are given the name and description of each digestive organ and attempt to match it to its corresponding image • Text is read by teacher revealing correct matching of description to image	Use of technical nouns and action verbs *digestion *oesophagus *liquids *saliva *tube *large intestine *small intestine *coils *absorbed *expands *contract *churn Modals to express possibility or probability e.g. I think this might be the Complex sentence with a Subordinating connective (causal) e.g. I think this might be the liver because	Assessment for learning ideas  Observation  • Were the students able to label the digestive system correctly?
Creating models of the digestive system  Students shown the labelled diagram, adapted from the text, 'What happens to the food we eat?' (Figure 1 above)  Label the different digestive organs  Students given a variety of materials (including play-dough) and they choose a digestive organ to make  As a group, brainstorm words that can be used to describe the appearance and feel of the organs  As a group, create sentences to describe each organ. e.g. the liver is a soft, red organ and is shaped like a triangle  Students label a blank diagram of the digestive system with the names of each organ (Figure 2).	Function  Describing – the appearance of digestive organs  Linguistic features: Use of technical nouns *oesophagus *large intestine *small intestine *liver *stomach  Use of adjectives * soft * round * long * red * yellow * small * large * curvy * pointy  Use of noun groups e.g. The stomach is yellow and peanut-shaped.  Compound sentences with a conjunction e.g. the liver is a soft, red organ and is shaped like a triangle.	Were the students able to label the digestive system correctly?  Figure 2  The Digestive System Directions: Print out and label the parts of the digestive system.  1. 2. 3. 4. WORD BANK large intestine small intestine stomach mouth  WORD STOMACH  PROCESS STOMACH  PORT STOMACH

## **Building the Field: Teaching and learning activities**

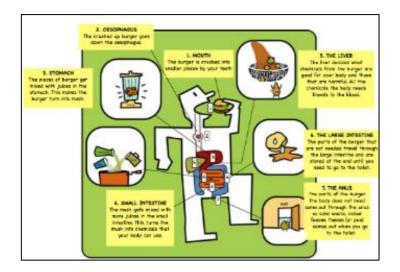
## **EAL Focus Group**

## Listening to, reading and viewing a range of texts to tune students into topic: Flow Chart

- Ask students to bring their models of the different digestive organs to the group.
- Students revise the name and appearance of each organ by orally explaining to the group. Have a sentence strip to support students, e.g. This is the . It and
- Teacher re- reads the flow chart to students, modelling again how the numbers, pictures and descriptions work together to give the reader information.

## Figure 1 Fin, K. (1997). How your body works. Woodbridge, Suffolk: Penguin.

- Students read the text again and underline any words or phrases they do not understand. Invite them to discuss this in pairs and then as a group, apply strategies to understand an unknown word.
- Students list what they have learnt and what they still need to find out about the body part they have created.



# **Linguistic focus**

### **Functions**

- Describing the appearance of digestive organs
- Clarifying unknown vocabulary
- Predicting the meaning of words, using the various comprehension strategies

## Linguistic features

#### Use of technical nouns

\*oesophagus \*large intestine \*small intestine \*liver \*stomach

## Compound sentences with a conjunction

e.g. the liver is a soft, red organ and is shaped like a

## Use of relating verb 'is'

e.g. the liver is a soft, red organ and is shaped like a triangle.

### Use of adjectives

\* soft \* round \* long \* red \* yellow\* small \* large

### Time connectives to signify sequence

e.g. First the food ... Then it...

## Question Forms (c)

'Wh' questions

e.g. What does churn mean?

### Observation

Observe students' use of:

**Assessment for learning ideas** 

- adjectives to describe their digestive organs.
- strategies to read and understand unknown words.

<b>Building the Fig</b>	eld: Teaching and lea	arning activitie	es		Linguistic focus	Assessment for learning ideas
Students going to Students answered Figure 3-Graphic o  Name of body part  Students Harris, N Wales: O  Teacher in the test the question  Research in the test Invite stu	<ul> <li>Students view an image of the digestive system and teacher explains they are going to investigate more information about each part.</li> <li>Students pose questions about the body parts that they would like to have answered. Questions are entered in a graphic organiser.</li> <li>Figure 3-Graphic organiser</li> <li>Name of body part who are its neighbours? (Nearest other body part)</li> <li>Students provided with the text: The Digestive System Harris, N., &amp; Aston, C. (2002). Look Closer at the Human Body. New South Wales: Orpheus Books.</li> <li>Teacher models Skimming and Scanning the text strategy highlighting keywords in the text to recall the main ideas in the first paragraph. (Teacher refers back to the questions posed in the graphic organiser and highlight the key words in the question)</li> <li>Researching one digestive organ, teacher models scanning to find the keywords in the text and use a post-it note to mark where the question has been answered. Invite students to do the same.</li> </ul>		Question Forms Wh-/How questions (what, which, why, when, where, how)  Use of technical nouns *oesophagus *large intestine *small intestine *liver *stomach  Action verbs *breaking down *crushing *pushing  Use of adjectives * soft * round * long * red * yellow * small * large * curvy * pointy			
another source  Students <a href="http://kid">http://kid</a> As a grou	view digital text, The Digital	gestive System:  bfs DSmoviesoure  formation that car	ce.html			Observation, questioning and feedback  Observe students as they share their ideas and complete the graphic organiser to assess their understanding of the topic and their use of the technical vocabulary.  Teacher questions and provides immediate, on the spot, verbal feedback to the class and individuals.

Building the field: Teaching and learning activities	Linguistic focus	Assessment for learning ideas
Whole Class and Small Groups Independent research  In partners, students research the different parts of the digestive system. Information is placed into the previously modelled graphic organiser.    Name of body part   Neighbours (nearest other body part)   Appearance   What it is used for features	Technical nouns *oesophagus*large intestine *small intestine *liver *stomach  Adjectives * soft * round * long * red * yellow * small * large * curvy * pointy  Action verbs *breaking down *crushing *pushing	Students add to their graphic organisers in an ongoing way throughout the unit as they learn more about the digestive system.      Students retain their graphic organisers for future reference.
<ul> <li>EAL Focus Group Recreating the Digestive System.</li> <li>Students work together to correctly position the model organs they have made inside an outline of the body, thus creating a representation of the digestive system.</li> <li>In pairs, students use the information they have researched to create labels for each organ.</li> </ul>	Prepositions e.g. The liver goes next to the stomach.  Technical nouns *oesophagus *large intestine *small intestine *liver *stomach  Action verbs with simple present tense * churns *breaks down *crushed up* mixes *travels *pushes *expels	Observation /Analysis of student work     Were the students able to create and label the digestive system correctly?
Students_view: Digital Explanation Text: <a href="http://www.youtube.com/watch?v=KO9HVg8NRo0">http://www.youtube.com/watch?v=KO9HVg8NRo0</a> (Tweety and Sylvester clip where Sylvester travels through the digestive system).      Students discuss what happens to Sylvester as he goes through the digestive system. What do the organs do?      Students make their favourite food with play dough and then manipulate it to demonstrate what happens to food as it travels through the digestive organs      Teacher explains to students that they are learning to use different action verbs to describe what happens during the digestive process e.g. The teeth grind/cut/crush up/pound the food into smaller pieces.      Students use action verbs while describing the digestive process e.g. In the stomach, the acid mix/break down/blend with the food.      Synonym list is built.	Action Verbs in Simple Present Tense e.g. The teeth grind/crush/cut up/pound the food into smaller pieces. The food travels/moves/goes down the oesophagus. In the stomach, the acid mix/break down/blend with the food  Technical nouns *oesophagus *large intestine *small intestine *liver *stomach	Teacher asks questions to ensure students are understanding what the organs are doing and encourages the students to think of synonyms for each action verb.

Building the field: Teaching and learning activities	Linguistic focus	Assessment for learning ideas
<ul> <li>Whole Class Enzyme Experiment (Appendix 3) From Preddey, V. (1999). The Human Body. New South Wales: Scholastic.</li> <li>Teacher explains to students that food needs to be broken down into smaller pieces so that it can travel through the digestive system and give us the energy we need.</li> <li>Students make jelly. After it cools slightly, mixture is divided into two bowls. Kiwi fruit is placed in one bowl.</li> <li>Students predict what will happen to the jelly with the kiwi fruit in it. Sentence strip to guide response e.g. I predict that I believe that I think that 'I think the jelly might change colour.'</li> <li>Students observe jelly next day and describe differences between the jelly bowls. (Photos taken at each stage of experiment) e.g. 'The jelly without the kiwi fruit is firmer than the jelly with it'. 'The jelly with the kiwi fruit didn't set because of the chemicals in the kiwi fruit'.</li> <li>Teacher explains to students that</li></ul>	Modals to express possibility or probability e.g. I think the jelly might change colour  Adjectives to compare e.g. The jelly without the kiwi fruit is firmer than the jelly with it  Complex sentences with causal conjunctions e.g. The jelly with the kiwi fruit didn't set because of the chemicals in the kiwi fruit  Temporal connectives to signify sequence • at the start, first, next, then, when/once,	Observations/Anecdotal notes  • Teacher to observe and record the success of
<ul> <li>Students sequence and retell from the photos of the enzyme experiment to show how it was carried out and what was observed</li> <li>Teacher models temporal (time) connectives to retell sequence, e.g. at the start, first, next, then, when/once, after, finally, at the end, while</li> <li>Class list of temporal connectives commenced and added to in an ongoing way</li> </ul>	after, finally, at the end, while	students' ability to sequence and retell how the enzyme experiment was carried out and what was observed.
throughout unit		
<ul> <li>EAL Focus Group Flow Chart Activity with Cause and Effect statements         <ul> <li>Teacher has on flashcards a range of casual connectives to explain what happened to the jelly in the experiment.</li> <li>Teacher models using the photos and the causal connectives to explain what happened in the jelly experiment</li></ul></li></ul>	*breaks down *sets *mixes *stops *prevents  Causal connectives E.g as a result, as a consequence, resulting in  Complex sentence with a subordinating causal conjunction e.g. The jelly in bowl 2 did not set because of the chemicals in the kiwi fruit.	Teacher to observe and record the success of students' ability to create complex sentence statement using causal connectives.

#### **Building the field: Teaching and learning activities Linguistic focus Assessment for learning ideas** The kiwi fruit as a result has an the ielly enzyme in it does not set that breaks down food Class list of causal connectives commenced and added to in an ongoing way throughout unit **EAL Focus Group** Planned Observation - Oral language analysis (pre-Use of technical nouns \*oesophagus \*large intestine \*small intestine \*liver **Presenting Digestive System** test). Students present their re-creation of the digestive system to class \*stomach Teacher listens to and films EAL students Students discuss what each organ is and what it does (using new vocabulary explaining how the food moves through the acquired throughout the learning and teaching sequence so far.) Action verbs with simple present tense digestive system. e.g. 'This is the stomach. It is soft and peanut-shaped. Its job is to break down the food e.g. This is the stomach. It is soft and peanut-shaped. Teacher analyses students' transcripts to we eat into small particles. The food becomes mushy because it mixes with saliva." Its job is to break down the food we eat into small identify students' strengths and areas of need, Retelling sequence using time connectives particles. e.g. grammar, appropriate vocabulary, • Teacher models the process to explain the sequence of what occurs to food as it pronunciation, fluency, intonation. Use of relating verb 'is' moves through the digestive system using flashcards with a range of temporal e.g. This is the stomach. It is soft and peanut-shaped. connectives e.g. first, next, then, after, finally... Students choose a temporal connective flashcard and as group retell sequence Its job is to break down the food we eat into small Planned Observation – writing analysis (pre-test). Students retell sequence with a partner particles. Students independently write an explanation First

# Complex sentences with subordinating causal conjunctions

e.g. The food becomes mushy  $\underline{\text{because}}$  it mixes with saliva.

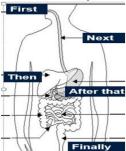
### Use of temporal connective

e.g. first, next, then, after, finally...

#### Use of causal connective

e.g. As a consequence, as a result, so, because, therefore...

- Students independently write an explanation text of the journey of rice and chicken through the digestive system.
- Teacher analyses students' writing to identify students' strengths and areas of need.



## Creating complex sentences using casual connectives

- Teacher models the process to explain what happens to the food as it moves through the digestive system using flashcards with a range of causal connectives
- e.g. 'First, the food we eat is crushed up and mixed with saliva (spit), as a
  consequence, it becomes mushy. As a result, the food can be swallowed easily'.
- Students in partners create their own statements and share with the group.
- Teacher listens to and films EAL students independently explaining how the food moves through the digestive system.

Students independently write an explanation text explanation of the journey of rice and chicken through the digestive system.

#### **Deconstruction and Modelling: Teaching and learning activities Linguistic focus** Assessment for learning ideas Analysis of student work Whole Class Linguistic Structure-Mentor Text -How does the Digestive System work? **Title**- usually a how or why question Were the students able to sequence cut up text with **General statement**- introduces the topic a focus on structure? Shared reading and deconstruction of mentor text – 'How does the Digestive Body of text- includes the explanation, which is in System work?' (Figure 4) to explicitly introduce the explanation text structure sequential order How Does the Digestive System work? (Figure 5) Discuss the purpose of the text. Conclusion - sums up the explanation Title: How does the Digestive System work? Highlight structure of the explanation text. **Pictures** General Statement: We, as humans, need food to fuel our bodies for energy, growth and repair. The digestive system Figure 4- Mentor Text -How does the Digestive System work? breaks down the foods we eat so that we have the energy Purpose: To help the reader understand the digestive process as easily as possible **Text Structure** we need to grow and survive. Intended Audience: Children in grades 3-6 HOW DOES THE DIGESTIVE SYSTEM WORK? **Body of text**: First, the food we eat is crushed up and mixed with saliva (spit), as a consequence, it becomes mushy. As a We, as humans, need food to fuel our bodies for energy, growth and repair. The digestive General Statement result, the food can be swallowed easily. system breaks down the foods we eat so that we have the energy we need to grow and The general statement Next, the broken-down food passes through the esophagus introduces the topic (the food passage) and moves into the stomach. There, the First, the food we eat is crushed up and mixed with saliva (spit), as a consequence, it food mixes with the juices in the stomach for several hours. becomes mushy. As a result, the food can be swallowed easily. The movement of the stomach muscles causes the food Next, the broken down food passes through the esophagus (the food passage) and moves particles to mix around. into the stomach. There, the food mixes with the juices in the stomach for several hours. The Body of Text Then the food enters the small intestine. The muscles in movement of the stomach muscles causes the food particles to mix around. The body includes the the intestine contract and relax, causing the food to move explanation, which is in a Then the food enters the small intestine. The muscles in the intestine contract and relax, sequential order causing the food to move onwards. After a few hours, the food changes into even smaller After a few hours, the food changes into even smaller particles. All the good things from the particles. All the good things from the food go into the food go into the blood stream, resulting in the body receiving the nutrients it needs. The blood stream, resulting in the body receiving the nutrients food particles that are not needed are sent to the large intestine. it needs. The food particles that are not needed are sent to Conclusion Finally, the waste that is not needed by the body is stored at the end of the large intestine. If the large intestine. the waste stays in our bodies, it causes us to get sick. Our muscles push the waste out of the

Students in pairs sequence stages (Figure 5).

body, which r

## **EAL Focus Group**

The conclusion, which

sums up the explanation

Pictures

EAL students sequence text as a group supported by teacher

the toilet to expel it.

Conclusion: Finally, the waste that is not needed by the body is stored at the end of the large intestine. If the waste

stays in our bodies, it causes us to get sick. Our muscles push the waste out of the body, which makes us to go to

## **Deconstruction and Modelling: Teaching and learning activities**

## **Linguistic focus**

# **Assessment for learning ideas**

#### **Whole Class**

## **Deconstruction of linguistic features in mentor text-Temporal Connectives**

- Direct students' attention to the time (temporal) connectives used to begin each paragraph and signify the stages of the digestive process.
- Highlight temporal connectives apparent in the text (Figure 5).
- Students sequence text correctly and label the text with the structure and temporal connectives used in the explanation (Figure 5).

#### **EAL Focus Group**

 EAL students sequence text and highlight temporal connective as a group supported by teacher

## **Temporal connectives**

## Figure 5 Temporal connectives

#### HOW DOES THE DIGESTIVE SYSTEM WORK?

 $W_{\Theta}$ , as humans, need food to fuel our bodies for energy, growth and repair. The digestive system breaks down the foods we eat so that we have the energy we need to grow and survive.

First, the food we eat is crushed up and mixed with saliva (spit), as a consequence, it becomes mushy. As a result, the food can be swallowed easily.

Next, the broken down food passes through the esophagus (the food passage) and moves into the stomach. There, the food mixes with the juices in the stomach for several hours. The movement of the stomach muscles causes the food particles to mix around.

contract and relax, causing the food to move onwards.

After a few hours, the food changes into even smaller particles. All the
good things from the food go into the blood stream, resulting in the
body receiving the nutrients it needs. The food particles that are not
needed are sent to the large intestine.

Then the food enters the small intestine. The muscles in the intestine

Finally, the waste that is not needed by the body is stored at the end of the large intestine. If the waste stays in our bodies, it causes us to get sick. Our muscles push the waste out of the body, which makes us to go to the toilet to expel it.

#### Observation

 Are the students able to identify the time connectives with teacher guided support and questioning?

## Analysis of student work

Were the students able to sequence the text highlighting the temporal connectives?

#### Whole class

## **Deconstruction of linguistic features in key text-Causal Connectives**

- Direct students' attention to the causal conjunctions and explain how these are used to signify cause and effect.
- Highlight the causal conjunctions (Figure 6).
- Underline the complex sentences with the causal conjunctions.

#### **EAL Focus Group**

#### Flow Chart Activity with cause and effect statements

- Teacher has on flashcards a range of casual connectives.
- Teacher directs students' attention to the highlighted sentences from the key text.
- Students draw pictures and use the causal conjunctions to create sentences showing the cause and effect of various digestive processes, as stated in key text.



## Use of causal connectives

## Figure 6-Causal connectives

#### HOW DOES THE DIGESTIVE SYSTEM WORK?

We, as humans, need food to fuel our bodies for energy, growth and repair. The digestive system breaks down the foods we eat SO that we have the energy we need to grow and survive.

First, the food we eat is crushed up and mixed with saliva (spit), as a consequence, it becomes mushy. As a result, the food can be swallowed easily.

Next, the broken down food passes through the esophagus (the food passage) and moves into the stomach. There, the food mixes with the juices in the stomach for several hours. The movement of the stomach muscles causes the food particles to mix around.

Then the food enters the small intestine. The muscles in the intestine contract and relax, causing the food to move onwards. After a few hours, the food changes into even smaller particles. All the good things from the food go into the blood stream, resulting in the body receiving the nutrients it needs. The food particles that are not needed are sent to the large intestine.

Finally, the waste that is not needed by the body is stored at the end of the large intestine. If the waste stays in our bodies, it causes us to get sick. Our muscles push the waste out of the body, which makes us to go to the toilet to expel it.

# Complex sentences with subordinating causal conjunctions

e.g. The food becomes mushy <u>because</u> it mixes with saliva.

The teeth grind the food into smaller pieces <u>so</u> they are easier to swallow.

## Observation/Analysis of student work Observations/Anecdotal notes

- Teacher to observe and record the success of students' ability to draw and create complex sentence statements using causal connectives
- Teacher to observe and record students' ability to explain what causes food to move through the digestive system and the effect of the various digestive processes.

Deconstruction and Modelling: Teaching and learning activities	Linguistic focus	Assessment for learning ideas
<ul> <li>Whole class         Cloze Activity (connectives deleted)         <ul> <li>Students complete cloze activities where the time connectives and causal conjunctions have been removed from the text.</li> </ul> </li> <li>Students share their cloze with a partner and discuss the effectiveness of their word choices (Appendix 4).</li> <li>EAL Focus Group         <ul> <li>EAL students complete cloze with a partner in the focus group supported by teacher</li> </ul> </li> </ul>	Time connectives to signify sequence e.g. First the food might. Then it  Complex sentences with subordinating causal conjunctions e.g. The food mixes with saliva, as a result it turns to mush.	Were the students able to complete the cloze using appropriate time connectives and causal conjunctions?     Were students able to discuss their choices and reasoning with their peers and teacher?
EAL Focus Group  Drawing inferences from the text and classifying information  True and false statements  • Students read the text 'How do our bodies digest food?' Adapted from 'Take a trip through your gut' Keaney, C. 2000. Body Systems. New South Wales: Black Dog Books (Appendix 5)  • Revise students' understanding of literal and inferential statements  • Students decide whether a number of statements (created by the teacher) about the digestive system are true or false  • Students the decide whether the statements are literal or inferential  • Student s record their answers in a table (Figure 7)	Function  Skimming and scanning to find specific information Inferring Using clues/words in the text to draw conclusions. Classifying information as true or false  Linguistic features Technical nouns ipices *waste *tube *oesophagus *large intestine *rectum *muscles *small intestine *liver *stomach  Action verbs *mush *push *crush *breaks down *sets *mixes *stops *prevents  Synonyms Thinking of synonyms for words in the statements and locating these in the text to decide whether the statement is true or false.	Analysis of student work/Identification of true or false and literal or inferential statements  • Were the students able to identify correctly the true and false statements?  • Were students able to identify the literal and inferential statements?  Figure 7  True or False?    Statement   True/False   Literal or Enferential?

## **Deconstruction and Modelling: Teaching and learning activities**

# Assessment for learning ideas

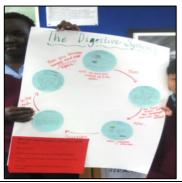
## **EAL Focus Group**

## **Visualisation of Key Text**

- \* In partners students choose a paragraph to visualise.
- \* Students draw a pictorial representation of their chosen stage on a kinder circle
- \* As a group, sequence the representation of each stage of the digestive process to create a flow chart.
- \* Students use flash cards with temporal and causal connectives to join each picture.

### Orally retelling the digestive process

Students orally retell the digestive process using the flow chart as a prompt.



## **Technical nouns**

**Linguistic focus** 

\* juices \*waste \*tube \*oesophagus \*large intestine \*rectum \*muscles \*small intestine \*liver \*stomach

### **Action verbs**

\*mush \*push \*crush \*breaks down \*sets \*mixes \*stops \*prevents

### Time connectives to signify sequence

e.g. First, food is crushed...

Next, it travels to...

## **Causal conjunctions**

Used to create complex sentences showing cause and effect,

e.g. The food becomes mushy <u>because</u> it mixes with saliva.

#### **Planned Observation**

- Observe and listen to EAL students as they:
  - Sequence the stages of the digestive process.
  - Explain the digestive process in sequence.
  - Explain what causes food to move through the digestive system.
  - Explain the effect different digestive organs have on food as it moves through the digestive system.

#### Whole Class

### Dictogloss 'Your Mouth' text (Appendix 6)

# Harris, N., & Aston, C. (2002). Look Closer at the Human Body. New South Wales: Orpheus Books.

This text compliments what the students have already learnt about the digestive process by providing more information about the role of the mouth. It reinforces adjectives used to describe nouns. It provides a focus on time connectives, which had been explored in the previous lesson.

- 1.Brainstorm what students already know about the mouth's role in the digestive process.
- 2. Teacher reads text. (Teacher explains to students that their learning intention is to record keywords in order to paraphrase the text. Teacher asks students to particularly focus on the words that tell us when things are happening (time connectives).
- 3. Teacher reads passage again, while students jot down key topic words.
- 4. In groups of three, with one student scribing, students recreate the text using key words.
- 5. Team share and compare their text with another triad and alter if necessary.
- 6. Teams share texts to whole class.
- 7. Teacher rereads original text which is displayed and students discuss their accuracy in terms of the meaning of the text and the time connectives used.
- 8. Whole class deconstruct text highlighting structure and linguistic features.

### Time connectives to signify sequence

e.g. First, the four teeth...Then, your tongue pushes...

### **Technical nouns**

\*jaws \*molars \*tongue \*saliva.

#### Action verbs

\*move up and down \*shred \*pushes \*grind \*formed \*rolls \*mixes \*swallow

#### **Causal conjunctions**

\*resulting in \*because \* in order to \* so that

## **Structure- Explanation**

Title. General statement-Body of text-Conclusion-Pictures

## Metalanguage associated with explanation text type

e.g. technical nouns, action verbs, time connectives, causal connectives and conjunctions, simple present tense, pronouns, circumstances of time, manner and place

## Planned Observation/ Analysis of student work

- Observe students listening for key information, recording keywords and phrases and reconstructing the written text with their team.
- How accurate were the students' texts in terms of the meaning and the time connectives used?
- Were students able to accurately deconstruct the text, highlighting structure and linguistic features?

Deconstruction and Modelling: Teaching and learning activities	Linguistic focus	Assessment for learning ideas
<ul> <li>Whole class         Modelling construction of an explanation: How do carbohydrates give us energy?     </li> <li>(Appendix 7)         <ul> <li>Have a range of foods containing simple and complex carbohydrates for students to observe (e.g. lollies, potatoes, bread, ice cream container, fruit, etc.). Discuss the two types of carbohydrates (simple and complex).</li> <li>Teacher models the construction of an explanation about how carbohydrates give us energy, articulating thinking and using metalanguage to describe how the structure and language choices.</li> <li>Students highlight the structure and language features once the text has been completed.</li> </ul> </li> </ul>	Structure- Explanation  Title. General statement-Body of text-Conclusion-Pictures  Metalanguage associated with explanation text type e.g. technical nouns, action verbs, time connectives, causal connectives and conjunctions, simple present tense, pronouns, circumstances of time, manner and place	Were students able to accurately deconstruct the text, highlighting structure and linguistic features?
Joint Construction: Teaching and learning activities	Linguistic focus	Assessment for learning ideas
<ul> <li>Whole class         Explanation text frame         <ul> <li>Students with teacher jointly construct the planning structure (Title, General statement, Body of text, Conclusion, Pictures) as the first stages of an explanation text frame for students to use as a scaffold when presenting an oral and written experiment explanation on how a bodily system works (Figure 8).</li> </ul> </li> <li>Whole class         <ul> <li>Jointly construct a text similar to mentor text</li> <li>Jointly plan with the students an explanation text on how rice would be digested using the 'Explanation text frame' constructed in the previous lesson.</li> <li>Teacher acts as a scribe, modelling and encouraging students to use the metalanguage they have learnt about explanation texts.</li> </ul> </li> </ul>	Linguistic Structure Figure 8 Explanation text  Purpose: Audience:  Title- usually a how or why question General statement- introduces the topic  Body of text- includes the explanation, which is in seque order  Conclusion- sums up the explanation Pictures  Structure- Explanation Title. General statement-Body of text-Conclusion-Pictures Metalanguage associated with explanation text type e.g. technical nouns, action verbs, time connectives, causal connectives and conjunctions, simple present tense, pronouns, circumstances of time, manner and place	Teacher to note students' ability to identify the purpose and structure of an explanation text.  Observation Observe students as they contribute their ideas to the jointly constructed text. Are they able to use the:      metalanguage to identify and describe the stages in the text?  Inguistic features such as technical nouns, action verbs, time connectives, causal connectives and conjunctions, simple present tense, pronouns, circumstances of time, manner and place?

#### Joint Construction: Teaching and learning activities **Linguistic focus Assessment for learning ideas** Whole class Structure- Explanation Analysis of student writing Figure 9-Modified 'Explanation text frame' Observe how the students, in pairs, jointly construct the Guided writing in partners. explanation text using the guided scaffold. Are they able Students in partners jointly plan an explanation on their focus group topic e.g. Purpose: Audience: to use the linguistic features, such as: physical fitness, mental fitness or nutrition. Title: technical nouns, action verbs, time connectives, Introduction **EAL Focus group** causal connectives and conjunctions, simple We, as humans need food to... • Jointly plan with the students an explanation text on how an apple would be present tense, pronouns, circumstances of time, Explanation digested using the modified 'Explanation text frame' which has sentence starters as manner and place. First, the food we eat is... an additional scaffold (Figure 9). Next, the broken-down food... Then the food... Teacher acts as a scribe, modelling and encouraging students to use the After a few hours, the food changes... metalanguage they have learnt about explanation texts. Conclusion (Summing up) Finally, the waste... Students use the 'Explanation Planning Frame' (Figure ...) and sentence starters to Metalanguage associated with explanation text type jointly construct the explanation text with a partner. e.g. technical nouns, action verbs, time connectives, causal connectives and conjunctions, simple present tense, pronouns, circumstances of time, manner and place Whole class Vocabulary Observation Pictures/images, music, sound effects, voice, visual Compare two digital texts: 'Spot the Difference' Observe students as they contribute their ideas to the effects, transitions, purpose, audience. Teacher presents two digital explanation texts about the human body to students. discussion. Are they able to: Teacher directs students to focus on the digital features of the texts, i.e. the images, o compare and contrast the features of a Complex sentences with subordinating causal music, sound effects, spoken elements, visual effects etc. digital explanation. conjunctions Students provided with a Venn Diagram and students asked to 'spot the differences describe the various features and digital e.g. I like the first digital because it has louder sound between these features. Teacher scribes response into the Venn Diagram. effects of the digital text. effects. express ideas about what makes a good digital explanation. Comparatives Better, louder, funnier, longer, shorter e.g. the first digital text had better graphics Students choose which text they feel is more effective in achieving the purpose of explaining how a body system works. List compiled of what makes a good digital explanation e, g, pictures, images, sound effects, graphics, transitions, voice....

#### Joint Construction: Teaching and learning activities **Linguistic focus Assessment for learning ideas** Whole Class Vocabulary Observation/Analysis of students digital recording Pictures/images, music, sound effects, voice, visual Recording a voice over Observe students as they record a voice over to effects, transitions, purpose, audience. View YouTube animation of an explanation of the digestive system: explain the stages of digestion that corresponds to https://youtu.be/ZBZWgrfZFbU the stages shown in the digital animation. Complex sentences with subordinating causal Mute the volume so all students can see is the graphics with no voice over. conjunctions Teacher models using Apple application Garage Band how to record a voice over e.g. I think we should use this image because it has that corresponds to the stage of the digestion as shown in the digital animation. more detail. Teacher explicitly focuses on: **Images** Comparatives Sound effects Better, louder, funnier, longer, shorter How to transfer voice overs to keynote e.g. this sound effect is clearer How to make images **EAL Focus Group** Planning of digital explanation Students view again You Tube animation of an explanation of the digestive system: https://youtu.be/ZBZWgrfZFbU (with sound) In partners, students use the Apple application GarageBand to record a voice over that corresponds to the stages of digestion as shown in the digital animation. Students are able to edit their voice recording as they go. Students use their list about good digital explanations to guide them Whole Class Function Observation Planning of digital explanation Observe students as they contribute their ideas to the Brainstorming what should be included in the planning and creation of the digital explanation text: Teacher and students plan and create a digital explanation for the text created by the digital explanation Justifying why a particular feature should be Brainstorming what should be included in the teacher during the modelling and deconstruction stage, titled included over another digital explanation. 'How do carbohydrates give us energy?' (Appendix 7) Justifying why a particular feature should be Vocabulary included over another. Teacher and students explore the following, always reinforcing the purpose and Pictures/images, music, sound effects, voice, visual audience for the presentation: effects, transitions, purpose, audience. o Computer applications to use to create the digital explanation (Apple Complex sentences with subordinating causal

Images to use

KeyNote would be the best choice)

How to transfer voice overs to keynote

Sound effects and music to use

How to make images move

coniunctions

more detail.

Comparatives

e.g. I think we should use this image because it has

Better, louder, funnier, longer, shorter e.g. this sound effect is clearer

### **Whole Class**

## Creation of oral/written text rubric (Appendix 9)

 Jointly construct a rubric for a written/ digital explanation. Teacher provides skeleton criteria and students input on the criteria

## Use of relating verbs

e.g. There <u>is</u> an introduction, body and conclusion... The information <u>is</u> sequenced...

Actions verbs are used...

## Metalanguage associated with explanation text type

e.g. technical nouns, action verbs, time connectives, causal connectives and conjunctions, simple present tense, pronouns, circumstances of time, manner and place

## Assessment for learning ideas

## **Independent Construction: Teaching and learning activities**

### **Whole Class**

#### Written text

Students Independently write an explanation text on the area of health-i.e. physical, mental fitness or nutrition to explain how they can reach their peak performance guided by the rubric.

- Individually students:
  - Select their explanation topic
  - Plan their explanation
  - Write a draft explanation
  - Independently revise and edit text using the rubric

## **EAL focus group**

Students independently write an explanation about the journey of their favourite foods through the digestive system.

- Individually students:
  - Select their favourite food
  - Plan their explanation
  - Write a draft explanation
  - o Independently revise and edit text using the rubric

## Scheduled conferencing group

- In small groups, students present their progress on their written explanation.
- Teacher guides students to give feedback about the explanations with reference to the jointly constructed rubric.
- Teacher gives feedback to students and records future goals to work on before the next scheduled conferencing group.
- Students use peer and teacher feedback to redraft text

# Linguistic focus Use of relating verbs

e.g. There <u>is</u> an introduction, body and conclusion... The information <u>is</u> sequenced...

Actions verbs are used...

# Metalanguage associated with explanation text type and digital representation of text

e.g. structure, body, conclusion, time connectives, causal conjunctions, simple present tense Pictures/images, music, sound effects, voice, visual effects, transitions, purpose, audience.

### Comparatives

Better, louder, funnier, longer, shorter e.g. The voice recording needs to be longer **Pronunciation and fluency** 

# Peer and self-assessment – Written explanation (Posttest)

- Students self-assess their writing using the rubric.
- Peer buddy provides feedback on their writing using the rubric.
- Teacher observe students as they work together in providing verbal feedback on the written texts.

### Analysis of work Teacher/student conference

 Teacher discusses with student their written text using rubric. Teacher provides feedback to the student on what they are managing well in their writing, and discuss a goal on how they can improve their writing.

#### **Portfolio**

 Students publish their text after revising and editing it from feedback given. Work samples are then retained in their learning portfolios.

Peer and self-assessment and teacher feedback – Oral Digital Explanation presentation to Year 5/6 audience (Post-test)

- Teacher videos EAL students' presentations.
- Students self-assess their oral presentation using the rubric.
- Peer buddy provides feedback on the student's oral presentation using the rubric.
- Observe students as they work together in providing verbal feedback on the oral presentations.

An example of an EAL student's written published text

### Whole class

#### Oral digital text

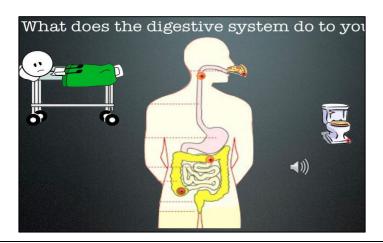
Students independently create their oral digital text guided by their written text and rubric. **Scheduled conferencing group** 

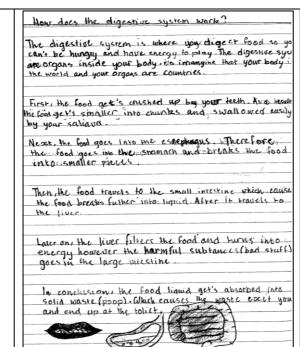
- In small groups, students present orally their progress on their digital explanation and receive feedback from peers and teacher
- Students use peer and teacher feedback to redraft text
- Students publish their explanation in a digital representation format

## Presentation of digital text

Students orally present their digital text to their peers.

An example of an EAL student's introduction visual of published text





 Note how accurately the students use the linguistic and digital features to explain the digestive process.

Analysis of work *Planned Observation – Oral language* analysis (post-test).

### Teacher/student conference.

 Teacher discusses with student their oral presentation text using the rubric and video.

Teacher provides feedback to the student on their strengths and the next step in how they can improve their oral presentation.

Reflection on Learning intentions and success criteria Ask students to reflect on the learning intentions at the commencement of the unit and to share what they feel they have achieved.

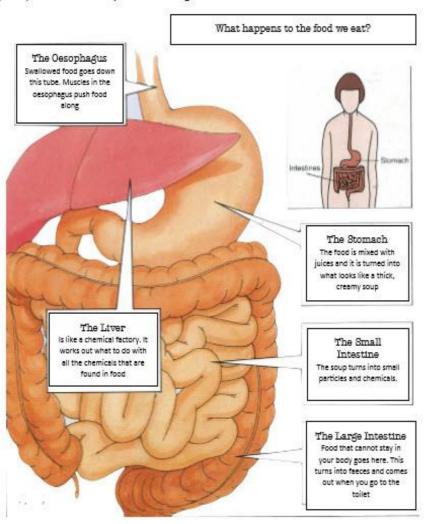
#### General evaluation The students displayed a high level of engagement and interest in this topic as it was targeted to their interest and particular athletic abilities. Students were given the opportunity to choose the area of wellbeing they were most interested in: healthy mind, healthy eating or physical fitness. They had begun interschool sports and Were the students interested in the learning about how they could use their mind and body to achieve success each week was a great motivator for them. topic? Much of the teachers' planning time was used to plan and write texts that were appropriate for the topic and built the grammatical structures and vocabulary the Did planned activities need to be modified? Why? students needed to be successful in participating in the inquiry unit. Integrating the topic through literacy was an integral part of the planning of the unit. The grammatical structures and vocabulary was constantly recycled throughout the unit, which resulted in the students gaining the confidence to experiment with using Which teaching strategies were these orally and in their independent writing. At the beginning of the unit the whole class was asked to write an explanation as a pre-test. The teachers set out a particularly successful? number of criteria required for an explanation text and the students' pre-tests were moderated according to these. This was then used to determine the different needs of the class and what should be included in the backward mapping text. The EAL group of students received extra focus lessons where they worked in a small group to work with additional texts containing greater amounts of visuals and complete a range of activities with the backward map, such as: cloze, creating true and false statements, flow charts and sequencing. When revisiting this unit, including more games, such as barrier games or bingo would be beneficial to students. The unit was successful as the students were engaged throughout the unit and produced both written and oral explanation texts of high quality. Their work had a **Content learning goals** genuine purpose and audience and this motivated them to ensure their explanations were produced and revised in detail. Were the topic goals achieved? Towards the end of the unit, students displayed worthwhile learning by wanting to use what they learnt to create change in our school such as promoting healthy Did the topic lead to worthwhile eating, implementing new programs and games and encouraging students to be more active. Teachers saw evidence of the topic goals being achieved through student's learning? independent choices and actions during the taking action component of the unit. The success of the unit relied heavily on the teachers working closely together as students were given the opportunity to work between different focus classes depending on their area of interest. **English language learning goals** All students' English language learning needs were ascertained through various assessment data, including written and oral pre-tests. For the students in the EAL focus group, their learning needs were also assessed using the EAL Developmental Continuum, which had been highlighted throughout the year, showing the students' Were general English language proficiencies and areas for improvement. learning needs highlighted by the There was a balance of written and spoken texts used throughout the unit, During the 'Building the Field' stage there were many activities that focused on oral unit? language and the development of the vocabulary associated with the digestive system. The backward mapping text was heavily used to teach the grammar and linguistic Was there a balance between written features of the explanation text type. Additional opportunities for student talk, such as 'Think Pair Share', could have been included. and spoken texts? **EAL considerations** The EAL students were challenged by the amount of unfamiliar, complex vocabulary used throughout the unit, however, with the extra support from the focus groups and the scaffolding provided, they achieved the goals of the unit with great success. Planning activities around the Teaching and Learning Cycle allowed teachers to How successfully did the unit involve continually build on the students' learning and ensure the pace of the unit was appropriate to the students developing understanding of the topic and the associated the EAL students? language. The EAL Developmental Continuum guided teachers to choose realistic goals for the EAL students and ensured the learning activities were focused on Which English language needs were achieving these goals. identified as a priority for future units? For these particular students, a strong focus on subject-specific vocabulary was very important because they were learning how to read, write and understand the Ideas for further units/activities meaning of many new scientific words for the first time. For future units, any new subject specific vocabulary introduced will need to be targeted again. What language focuses need to be During literacy sessions, the students were able to display the learning gained from this unit by transferring temporal connectives and casual conjunctions when targeted again in future units? writing other genres such as reports, procedures and recounts. What further topics will complement Other topics that could complement this unit include: changes in the body, changes associated with puberty, health and safety in our community, social skills, this unit? respectful relationships and diverse communities. Other genres such as information report, chain of events, documentaries and informative videos would also complement this unit.

This is an example of the mentor text 'How the digestive system works adapted from a text titled 'Where does food go?' by Durkin, Ferguson and Sperring (2006). This is to primarily be used during the Modelled/Deconstruction and Joint Construction stages of the Teaching and Learning Cycle when working with the EAL focus group's area of interest.

Text Structure	Purpose: To help the reader understand the digestive process as easily as possible Intended Audience: Children in grades 3-6	Language Features
Title	HOW DOES THE DIGESTIVE SYSTEM WORK?	Present tense Action verbs
General Statement	We, as humans, need food to fuel our bodies for energy, growth and repair. The digestive system breaks down the foods we eat so that we have the energy we need to grow and survive.	Action veros
The general statement introduces the topic	First, the food we eat is crushed up and mixed with saliva (spit), as a consequence, it becomes mushy. As a result, the food can be swallowed easily.	Clear, logical sentences
Body of Text	Next, the broken down food passes through a tube the esophagus (the food passage) and moves into the stomach. There, the food mixes with the juices in the stomach for several hours. The movement of the stomach muscles causes the food particles to mix around.	Temporal connectives
The body includes the explanation, which is in a sequential order	Then the food enters the small intestine. The muscles in the intestine contract and relax, causing the food to move <u>onwards</u> .  After a few hours, the food changes into even smaller particles. All the good things from the food go into the blood stream, resulting in the body receiving the nutrients it	Causal connectives
	needs. The food particles that are not needed are sent to the large intestine.	Pronouns
Conclusion	Finally, the waste that is not needed by the body is stored at the end of the large intestine. If the waste stays in our bodies, it causes us to get sick. Our muscles push the waste out of the body, which makes us go to the toilet to expel it.	Prepositions
The conclusion, which sums up the explanation order		Adverbs and Adverbial
Pictures		Phrases of time manner and place
		Paragraphing

## Labelled Diagram

Adapted from What happens to the food we eat? Royston, A. (1995). The Human Body. London: Kingfisher.



## Appendix 3

## **Enzyme Experiment**

Preddey, V. (1999). The Human Body. New South Wales: Scholastic.

Experiment: How can jelly and kiwi fruit explain how our stomachs help to digest food?

## What you need:

Jelly Crystals Kiwi frult, Clear cups or containers Measuring jug Hot Water Spoon



### What to do:

- 1. Weigh out about 50 grams of kiwi fruit into a clear container.
- Make your jelly by following the instructions on the packet. This usually means adding hot water to the jelly crystals and mixing thoroughly.
- 3. Pour the jelly mix on top of the kiwi until the container is nearly full.
- 4. Put the cups in the fridge and leave them over night.
- 5. Now that the jelly has had time to set, take a look at your results

What was the difference?

# What's happening:

There is a chemical in jelly called gelatine. The gelatine acts like a net, trapping the Water, sugar and flavourings and keeping the jelly solid. In kiwi fruit, there is an enzyme called bromelain. This enzyme breaks up this gelatine net into tiny pieces - so the jelly stays runny!

We have similar enzymes in our sallya and in our stomach that help us break down and digest our food.

# Cloze activity

HOW DOES THE DIGESTIVE SYSTEM WORK?

We, as human		erani eran eran eran eran eran eran eran eran			Congressor og troc
	s, need food to fu		25000	9.5	53
	s down the foods v	ve eat so that we	have the ene	rgy we need to	grow and
survive.					
	the food we e	at is crushed up	and mixed wit	th saliva (spit),	
	, it becomes m	ushy	, the foo	d can be swallo	wed easily.
	the broken do	own food passes	through a tub	e called the esop	hagus (the
food passage)	and moves into th	e stomach. Ther	e, the food m	ixes with the juic	es in the
stomach for s	everal hours. The r	movement of the	stomach mus	scles causes the	food particles
mix around.					
	the food enter	s the small intest	ine. The musc	les in the intesti	ne contract an
relax,	the food				
	a few hours, th	e food changes i	into even smal	ller particles. All	the good
	a few hours, th	_			_
substances fro		sorbed into the	blood stream,		_the body
substances fro	om the food are ab	sorbed into the	blood stream,		_the body
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substances fro receiving the intestine.	om the food are ab	sorbed into the	blood stream, es that are no	t needed are sen	the body
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substances fro receiving the i intestine. intestine. If th our muscles p	om the food are ab nutrients it needs. , the waste tha e waste stays in or ush the waste out	t is not needed bur bodies, it	blood stream, es that are not by the body is u ich makes us t	t needed are sen stored at the en is getting sick	_the body  It to the large  d of the large

## Appendix 5

'How do our bodies digest food?' Adapted from 'Take a trip through your gut' *Keaney, C. 2000. Body Systems. New South Wales: Black Dog Books* 

## How do our bodies digest food?

Our bodies must digest the foods we have eaten.

When we chew, food is crushed up and mixed with saliva so it becomes mushy.

 We swallow the mush and it travels through the esophagus, a long tube that runs from the mouth, before it goes into the stomach. Inside the stomach there are juices that mix the food until it looks like thick soup.

Next, the food goes into a long tube, which is all folded up inside the body, called the small intestine. Juices from the liver mush up the food even more, and good things from the food go into the blood, which takes them to parts of the body where they are needed.

The food then goes to the large intestine. Water from the food
 goes into the blood.

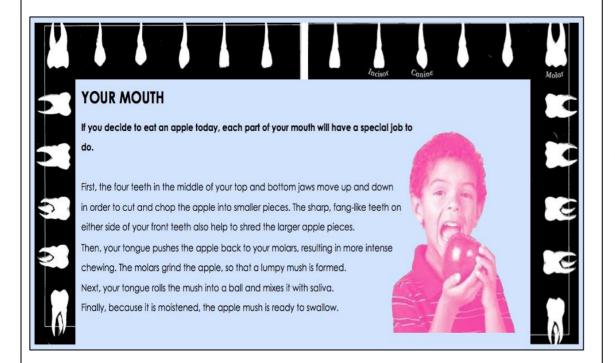
By now, the body has taken all the things it needs from the food. What is left is waste that is not needed by the body. It gets stored at the end of the large intestine inside the rectum. The waste must leave or the body will get sick. Muscles push the waste out of the body through the anus, which is the opening in your bottom.

## How long does it take for the body to digest food?

Food can be 3-4 hours in the stomach, then about 3 more hours as it moves through the intestine. It can stay in the large intestine for up to 36 hours. So, depending on the type of food and the speed at which it moves, it can take about 40 hours or more.

## Dictogloss 'Your Mouth' text

Harris, N., & Aston, C. (2002). Look Closer at the Human Body. New South Wales: Orpheus Books.



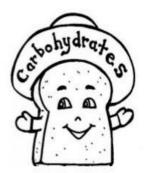
## Appendix 7

Modelled construction of an explanation: 'How do carbohydrates give us energy?' written by Year 5/6 teachers.

Carbohydrates (carbs) an important energy source for our bodies.

There are two types of carbs in foods: simple and complex. Simple carbs are found in refined sugar, like lollies and complex carbs are found in healthier foods, like potatoes.

When carbohydrates are digested, they help the brain and muscles function by transforming sugar into the energy your body needs.



Firstly, when you eat food containing carbs, your digestive system begins breaking these down. Your stomach acids digest what you eat, and as a result, the food moves to the small intestines. While the carbs are in your small intestines, your body breaks these down into simple sugars.

Next, the simple sugars are absorbed through the small intestines and into the bloodstream. As a result, the sugar level rises in your body.

Because of the rising sugar levels, the pancreas releases a hormone called insulin.

Finally, the insulin moves the sugar from the blood into the cells so the sugar can be used as a source of energy.

Simple carbohydrates make this process happen very fast, making you more likely to feel hungry again soon. Complex carbohydrates are digested slowly, making you feel fuller for longer and giving you energy over long period of time.

# Digital explanation rubric

		Needs more work (0)	Good(1)	The Best (2)	
		No clear introduction or body	` `	Text includes a clear title (as a	
	Structure	with explanation or conclusion	<ul> <li>Text is missing one or some parts (E.g. missing introduction, body</li> </ul>	question), an introduction, a body	
	Structure	included. Delivered in one large		with explanation and a	
	L	slab of text	with explanation or conclusion)	conclusion.	
			<ul> <li>Introduction does not clearly state</li> </ul>	Introduction clearly states topic	
	Introduction	<ul> <li>No introduction is included</li> </ul>	topic- information is unclear and	and explains what it is	
			unimportant	·	
			<ul> <li>Some parts of the explanation</li> </ul>	The body of the text clearly	
	Body (explanation)	<ul> <li>Explanation is not in sequence.</li> </ul>	explain one or two steps in the	explains all of the steps in the	
	/	Steps of the process mixed up	process. Some steps are mixed	process. Each step is in the	
			υр	correct order	
			<ul> <li>Information is connected using</li> </ul>	Information is connected using	
	l <u>.</u>		some Temporal connectives (1-2	temporal connectives; It is clear	
	Temporal	Limited temporal connectives	Temporal connectives used	which step comes in which order.	
	Connectives	used, such as 'then'	throughout in their correct	(3-4 Temporal connectives used	
			context)	throughout in their correct	
	-		• Information to compared with	context)	
Text Features			<ul> <li>Information is connected with some or the same casual</li> </ul>	Information is connected with a	
lexi rediores	Causal Caniunations	• No amount continuations used		range of casual conjunctions. (4-5	
	Causai Conjunctions	<ul> <li>No casual conjunctions used</li> </ul>	conjunctions. (1-3 causal conjunctions used throughout in	Causal conjunctions used throughout	
			their correct context)	in their correct context)	
			men correct context)	A diagram is included. The	
			<ul> <li>A picture is included but does not</li> </ul>	diagram is made by the student	
	Diagram/picture	No diagram included	match topic. Does not provide a	and represents the process and	
	Diagram/pictore	140 diagram maladea	deeper understanding	helps the audience's	
			deeper understanding	understanding of the topic	
		Tense is unclear-a range of tenses	Another tense is used consistently		
	Simple present tense	are used	(Past or future)	present tense	
		Pronouns (such as 'it') are used	Pronouns (such as 'it') are used a	Pronouns (such as 'it') are used	
	Pronouns	way too much and the listener	bit too much and sometimes the	and the lister knows the noun they	
		doesn't know what 'it' is	listener doesn't know what 'it' is	are connected to	
	A .4	There is very little use of action	Some action verbs are used	A variety of action verbs are	
	Action verbs	verbs used correctly	correctly	used correctly	
	Sentence structure	Only some sentences are not	Most sentences are spoken	Sentences are spoken clearly	
	Jenience structure	spoken clearly	clearly .	- Semences are spoken dearly	
	Descriptive	<ul> <li>Few or no adjectives are used to</li> </ul>	<ul> <li>Some adjectives are used to</li> </ul>	A variety of adjectives are used	
	language	describe organs or processes	describe organs or processes	to describe organs or processes	
			<ul> <li>Some information provided in the</li> </ul>		
	_	<ul> <li>Information has not been</li> </ul>	author's opinion but most is true	researched, is true and factual	
	True and factual	researched and is the author's	and factual.	information.	
	information	opinion.	Or	•	
		<ul> <li>No essential detail included</li> </ul>	The explanation has some	The explanation has a great dea	
Information		Andrea has real all to f	essential detail	of essential detail	
		Author has copied all information		All :	
	Information is delivered in own	from the internet or resources from the classroom. No	copied from the internet or classroom resources, but most is	All information has been     paraphrased and delivered in	
	words	information is delivered in their	delivered in the author's own	the author's own words	
	words	own words	words	me domoi s own words	
				Scientific language is used	
Vocabulary	Scientific vocabulary	<ul> <li>No scientific words used</li> </ul>	<ul> <li>Some scientific words used</li> </ul>	throughout the text	
			Digital presentation includes	•	
			features such as sound effects,	Digital presentation includes	
		Digital presentation is not very	moving images, music and voice	features such as sound effects,	
Digital Feature	es	engaging and has little digital	recordings BUT these may not	moving images, music and voice recordings. These match the	
		features	match the explanation, may not	explanation and are appropriate	
			be appropriate to the text type	to the text type and audience	
			or audience	10 me lexi Type and audience	
		<ul> <li>It is difficult for the audience to</li> </ul>			
		understand what you are saying	There is noticeable stumbling	There is hardly any stumbling	
Pronunciation	and fluency	because you are mumbling and	Most words are pronounced	Words are pronounced clearly	
	,	not pronouncing words clearly	clearly and correctly	and correctly	
		and correctly  There is a lot of stumbling	,	" ,	