

# EAL learning, pedagogy, and materials

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Lecture (30 minutes)

- English proficiency and educational achievement
- English language profiles of EAL learners
- Language support needs and evidence-based teaching
  - Vocabulary
  - Reading comprehension



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Coffee! (10-15 minutes)





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Practical part- Your turn! (40 minutes)



#### **EAL learners and diversity in classrooms**







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- Language is a primary medium of teaching and learning
- Teaching success mediated by language





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#### Cummins, 2000:

Cognitively-demanding communication "These "in 1538 Henry VIII was diagrams excommunicated" show cell Context-embedded mitosis" communication Context-reduced communication "Your violin is in "Put the the music room on books on the shelf above the this table!" piano"

Cognitively-undemanding communication



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Basic Interpersonal Communication Skills vs. Cognitive Academic Language
Proficiency
or PICS va. CAL P. (Summing 2000)

or BICS vs. CALP (Cummins, 2000)



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- Basic Interpersonal Communication Skills vs. Cognitive Academic Language Proficiency or BICS vs. CALP (Cummins, 2000)
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- Realistic expectations
- "Hidden" difficulties with CALP, vocabulary and reading comprehension



## Vocabulary



## Vocabulary

"If a student can say a word, they know it."









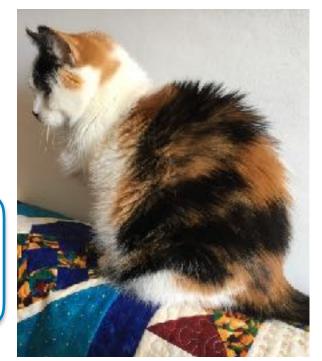








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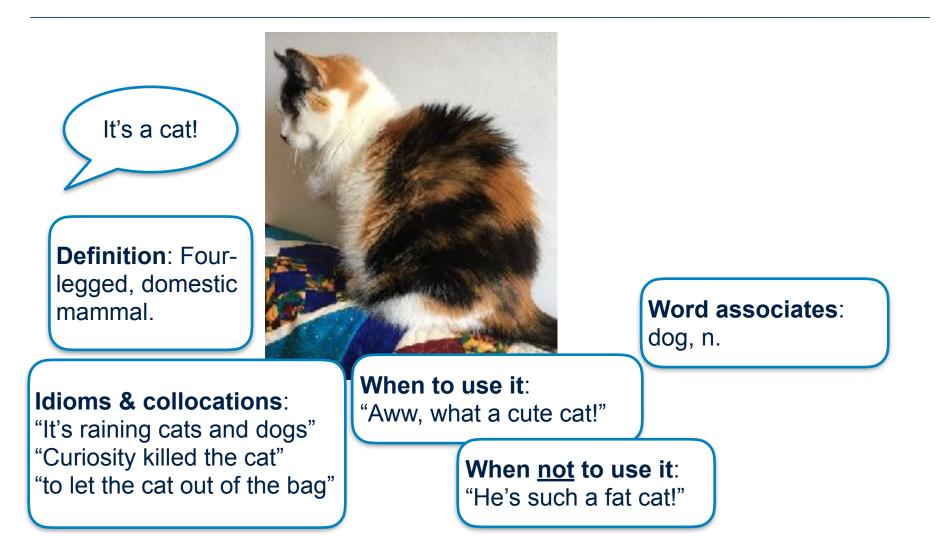
**Definition**: Fourlegged, domestic mammal.

It's a cat!

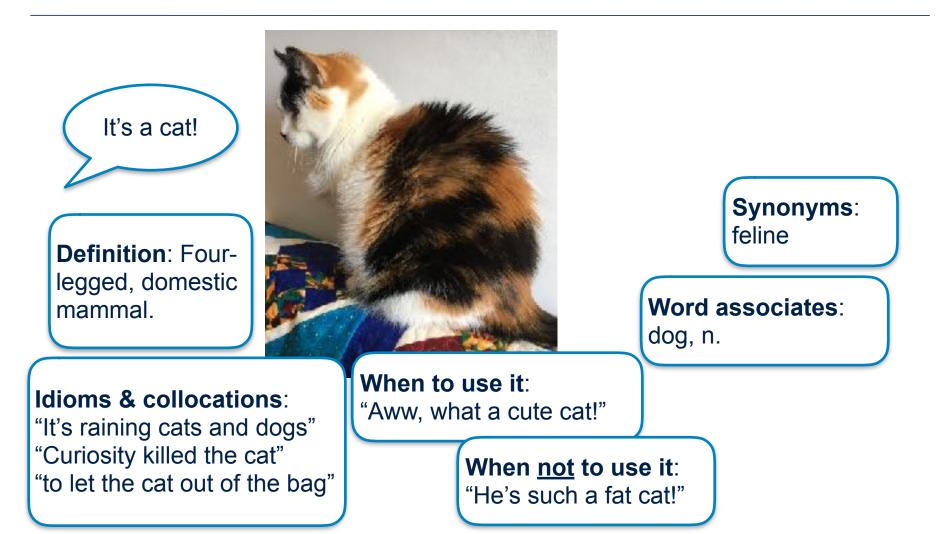
Idioms & collocations: "It's raining cats and dogs" "Curiosity killed the cat" "to let the cat out of the bag" When to use it: "Aww, what a cute cat!"

> When <u>not</u> to use it: "He's such a fat cat!"











Synonyms:

feline

#### Knowing the word "cat"

"to let the cat out of the bag"



When not to use it: "He's such a fat cat!"



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# Martinez & Murphy, 2011 The task

Let me tell you about my home. It's on this little hill out in the country. But I'm not far from the city (I don't like the city – do you?) – not much time to get here. I can't wait to show you a photo... or you can call me to come over to see in person! 07786 237 679

same words \_\_\_\_\_ all very frequent words (top 2,000)

exact

I don't get out much – it's about time I do. I'm not from here – this country or city. (But I like this country.) I'm far from home. I'm a little over the hill, let me tell you, but you can't tell! (I can show you my photo, or wait to come see me in person!) Call me on 07786 554 0978

#### Martinez & Murphy, 2011 (cont.)

#### The results



I don't like to go out much. The thing is, I have two left feet and I need to watch my spending. Now, for what it's worth, every so often I do have a ball playing football with my kids (my kids see me through the day) and even having one drink on occasion. (And not two at a time!) But I never get carried away or lose it. Having a good time doesn't have to be hard or cost you an arm and a leg. (Mind you, I'm not flat broke!) I'm a real team player, looking out for others all the time – especially my special kids. With my kids, a good time is to be had every time.

- 17. M She frequently plays football with her children.
- 18. Her children are with her most of the day.
- 19. She drinks when it is a special occasion.

My comprehension of this text: 5% 25% 50% 75% 100%





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- EAL students (and other poor comprehenders) less likely, especially with multi-word/ figurative vocabulary (Martinez & Murphy, 2011; Burgoyne, Whiteley, Hutchinson, 2013; ongoing PhD research)
- Word knowledge is form, meaning, and use
- Students will not notice or infer all unknown words and phrases
- Explicit vocabulary teaching is key







Features of good vocabulary exercises: (Nation, 2001):

• Clear learning goal



- Clear learning goal
- Support psychological conditions of learning
  - Notice
  - Retrieve
  - Generate



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- Recognizing words in parts
  - Unhappiness
- Recognizing meaning/function of affixes
  - happiness derives a noun
- Changes to written & spoken form with addition of affixes
  - happy + ness = happiness
- Which stems take which affixes?



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**Example exercises** (Nation, 2001; Murphy & Unthiah, 2015):

- Morphological decomposition (see also curriculum- DfE, 2014)
- Words/ phrases in use (e.g. with image, highlighted in text)
- Re-use newly introduced words in other tasks
- Cognates
- "It's my word"
- "What is it?"







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• EAL students & poor comprehenders struggle with comprehension, not decoding (Spencer & Wagner, 2015)



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- Vocabulary (Spencer & Wagner, 2015; Murphy & Unthiah, 2015)
- Background knowledge (Burgoyne, Whiteley, Hutchinson, 2013)
- Deep reading & monitoring (McNamara & O'Reilly, 2009)

#### McNamara, 2017



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In eukaryotic cells, there are two distinct but overlapping stages of cell division. In the first stage, mitosis, one complete set of chromosomes goes to each daughter cell. Mitosis guarantees that all of the genetic information in the nuclear DNA of the parent cell will go to each daughter cell. Low coherence text

In the second stage of cell division the cytoplasm and its contents divide. This process is cytokinesis. Cytokinesis is not as precise a process as mitosis. The amount of cytoplasm in a daughter cell will be about half of that in the parent cell. Each daughter cell will have about half of the organelles from the cytoplasm of the parent cell. But there is no precise mechanism working during cytokinesis to guarantee that each daughter cell will receive exactly half of the parent cell's cytoplasm and its organelles.

There are four distinct phases of mitosis: prophase, metaphase, anaphase, and telophase. These phases are well known because it is possible to observe them with the light microscope.

### McNamara, 2017



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#### Cell Division

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#### High coherence text

Cell division occurs to reproduce and replace cells. The division of cells with a membrane-bound nucleus and organelles (eukaryotic cells) involves two distinct but overlapping stages, mitosis and cytokinesis. Mitosis occurs to replicate the cell's genetic material in the nucleus, whereas cytokinesis occurs to divide the gel-like liquid surrounding the cell's nucleus, called cytoplasm. Mitosis includes phases which will be described here. Cytokinesis begins during the last of the four phases.

#### Mitosis



#### Strategies to encourage deep reading

Table 1. Examples of strategies used by participants in McNamara (2004) for sentence 3 of cell mitosis: "Mitosis gual the genetic information in the nuclear DNA of the parent cell will go to each daughter cell."

Strategy	Self-Explanation
Comprehension	Example 1: "I don't remember what DNA stands for."
monitoring	Example 2. "So I guess daughter cells are a part of a larger cell or came from a larger ce know."
Paraphrasing	Example 1: "So each daughter cell will receive a duplicate copy of the same strand of DI parent cell."
	Example 2: "Ok through this process of mitosis all the genetic information belongs in the parent cell and that is transferred over to the daughter cell."
Elaboration	Example 1: "Ok so there's the daughter cell and then there's a parent cell-mitosis it ha
	genetic information so when I'm thinking of cell division I'm thinking of maybe how a baby how it's developing."
	Example 2: "So by mitosis it guarantees that the chromosomes will get passed on so tha whatever will be able to live on or whatever."
Using logic	Example 1: "Ok what they're saying is that mitosis will make sure that an equal amounts information will go to each of the cells—equal amount will go to each daughter cell that we develop basically the same—multiply the same."
	Example 2: "OK, so the genetic information that must be the chromosomes because the are going into each of the cells. And that is made up of the DNA. So a part ofa part of each of genetic information which is the DNA goes into each of the two cells that come
Prediction	Example 1: "Ok this is the separation of the cell-the DNA-the next one should be the R Example 2: "So that's the first stage, now they'll give the second one."
Bridging inference	Example 2: "So mitosis—the first stage of cell division where each set of chromosomes g daughter cell will contain DNA."





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- Background knowledge (Burgoyne, Whiteley, Hutchinson, 2013)
- Deep reading & monitoring (McNamara & O'Reilly, 2009)
  - Text coherence
  - Tasks/ strategies



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  - Text coherence
  - Tasks/ strategies
- Motivation (Willingham, 2017)
- Teach and activate vocabulary and background knowledge
- Encourage deeper reading through texts and task choices
- Make texts relevant and motivating



#### In a moment: Your turn! - Materials and how to

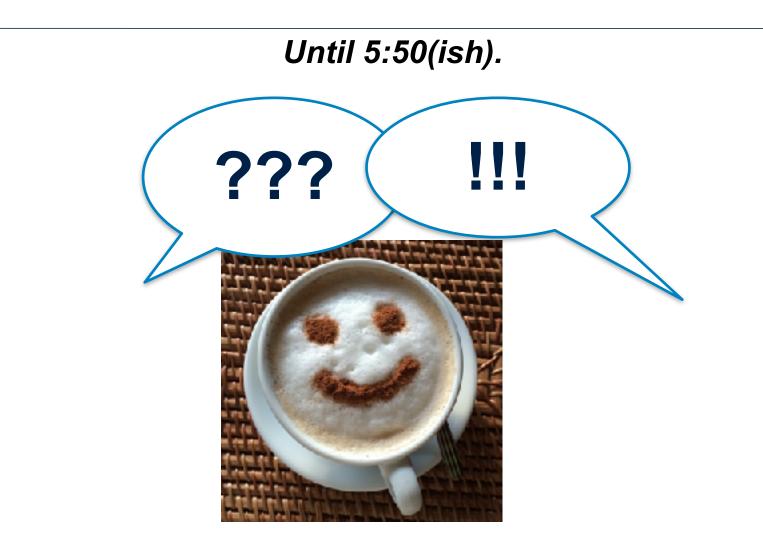


#### In a moment: Your turn! - Materials and how to





#### Now: Task time!





#### **Reviewing the practical**



### **Reviewing the practical**

- What did you think about the text- would you use it?
- Which words would you teach, and how?
- What online resources did you find useful? What did you use them for?



# **Thank You!**

#### Annina Hessel annina.hessel@education.ox.ac.uk @AnninaHessel Supervisors: Victoria A. Murphy & Kate Nation







Research in English as an Additional Language