

# *Presentation on SciE-Lex and Conclusion*

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## Resources for ESP teaching: *SciE-Lex*

- Lexical database of non-specialised (bio)medical terms
- provide the scientific community with **useful information** on the active use of **general terms in the biomedical register**
- help **NNES writers enhance their knowledge of collocations** in biomedical English writing

# Resources for ESP teaching: *SciE-Lex*

## *SciE-Lex*

- *Health Science Corpus compilation (HSC)*
  - **Impact scientific journals** (biology, biochemistry, medicine)
  - **718 articles+4 million words**
- *Information displayed:*
  - **Lexicogrammatical and collocational information** about the most common **general terms**, frequently used in the **biomedical register**
  - **List of bundles/phraseological units**, prototypically used in the scientific discourse, their discourse function (“moves”) and textual distribution

# Resources for ESP teaching: *SciE-Lex* (First phase)

- *SciE-Lex* provides **lexicogrammatical information** about the most common **collocations of general terms**, frequently used in the **biomedical register**
- **Grammatical category(C)**
- **Inflected forms(M)**
- **Equivalent in Spanish(E)**
- **Morphosyntactic patterns of occurrences (C)**
- **Collocations (L)**
- **Examples of real use\_** extracted from the HSC (Ex)
- **Usage notes(N)**

# SciE-Lex output (First phase)

[www.ub.edu/grelc/eng/index.php](http://www.ub.edu/grelc/eng/index.php)

The screenshot shows the SciE-Lex website interface. At the top, there is a navigation bar with the SciE-Lex logo and the text 'Diccionario Electrónico de Combinaciones Léxicas en el Inglés Científico'. Below this is a search bar and a list of utility links. The main content area is divided into two sections: a vertical list of words on the left and a detailed entry for the word 'Approach' on the right.

**Word List (Left):**

A	B	C
Accelerate	Accelerate	Accelerate
Acceleration	Acceleration	Acceleration
Accept	Accept	Accept
Acceptable	Acceptable	Acceptable
Access	Access	Access
Accessible	Accessible	Accessible
Accomplish	Accomplish	Accomplish
According	According	According
Account	Account	Account
Account for	Account for	Account for
Accumulate	Accumulate	Accumulate
Accumulation	Accumulation	Accumulation
Accuracy	Accuracy	Accuracy
Accurate	Accurate	Accurate
Accurately	Accurately	Accurately
Achieve	Achieve	Achieve
Acid	Acid	Acid
Acidification	Acidification	Acidification
Accordance	Accordance	Accordance
Acquire	Acquire	Acquire
Act	Act	Act
Action	Action	Action
Activate	Activate	Activate
Activation	Activation	Activation
Active	Active	Active
Activity	Activity	Activity
Actual	Actual	Actual
Acute	Acute	Acute
Adapt	Adapt	Adapt
Add	Add	Add
Addition	Addition	Addition

**Approach Entry (Right):**

**Approach**

**N** [enfoque, planteamiento, metodología] approach, approaches

**Adj ~** alternative ~ | analytical ~ | appropriate ~ | biochemical ~ | complementary ~ | computational ~ | genetic ~ | effective ~, powerful ~ | experimental ~ | heuristic ~ | integrated ~ | molecular ~ | new ~ | radical ~ | same ~, similar ~ | statistical ~ | systematic ~  
an alternative approach to the question

**~ V** ~ demonstrate, ~ reveal | ~ distinguish, ~ identify | ~ enable | ~ evaluate | ~ lead to | ~ offer, ~ provide  
This approach provides an alternative way of producing embryos.

**V ~** apply ~ | develop ~ | refine ~ | take ~ | use ~  
We applied a similar approach.

**~ Prep** ~ for | ~ of | ~ to  
This is an effective approach for testing the new model. | We used the simplified approach of adding together the two components. | This approach to establishing a proper dose is only an approximation.

**~ to-inf** ~ to define | ~ to demonstrate, ~ to establish | ~ to estimate | ~ to identify | ~ to isolate | ~ to study  
We have used a similar approach to study the function of these structures.

**V(1)** [enfocar, considerar] approach, approaches, approaching, approached

**~ N** ~ problem, ~ question

## Resources for ESP teaching: *SciE-Lex* (Second phase)

- Highlight **useful phrases and expressions (bundles/phraseological units)** used for **various rhetorical functions** in the **scientific register**



**valuable resource for NNES writers** to become aware of the **mechanics** that govern **academic writing**

# Resources for ESP teaching: *SciE-Lex* (Second phase)

## Information displayed (Second phase):

- ❖ **List of bundles/phraseological units,**  
prototypically used in the scientific discourse
- ❖ **Discourse function (“moves”)**
- ❖ **Textual distribution**

# Bundles in *SciE-Lex* output

[www.ub.edu/grelic/eng/index.php](http://www.ub.edu/grelic/eng/index.php)

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Label	Lift	List
Label(l)ing	Liftoff	Little
Lack	light	Live
Large	lighting	Living
Largely	like	Load
Last	-like	Loader
Lasting	likelihood	Loading
Late	Likely	Local
Lay	Liken	Localisation
Layer	Likeness	Localise, Localize
Lead	Likewise	Locally
Leading	Limit	Locate
Leaf	Limitation	Location
Learn	Limited	Long
Learning	Limiting	Look
Least	Line	Lose
Leave	Lineage	Loss
Left	Linear	Lost
Length	Linearly	Lot
Less	Link	Low
Lessen	Linkage	Lower
Lesser	Linked	Lowering
Level	Linker	Lung
Lie	linking	
Life	Liquid	

## Likely

← headword

Bundle	Discourse Function	Text distribution
		results
is likely to is likely to be	Expressing possibility and probability & Hedging [1]	
		discussion

[1] Ex: *The suppressor screen devised in this study is likely to be of general use in identifying interacting proteins [...]*

it seems likely that it is likely that	Expressing possibility and probability & Hedging [1]	discussion
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[1] Ex: *However, it seems likely that this advantage of robust behavior is sufficiently decisive*

Note: usually introduced by the following connectors: "however", "nonetheless", "indeed", "therefore", "consequently".

		results
are likely to be it is likely to be	Expressing possibility and probability & Hedging [1]	
		discussion

[1] Ex: *the signals in this system are likely to be complex.*

more likely to be most likely to be	Expressing possibility and probability & Hedging [1]	discussion
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[1] Ex: *Females appear far more likely to be infertile.*

Note: "Most" places more emphasis on the probability

		results
it is likely that	Expressing possibility and probability & Hedging [1]	
		discussion

[1] Ex: *It is likely that hnRNP D0B has a single transactivator domain.*



# Discourse functions in *SciE-Lex*

[www.ub.edu/grelic/eng/index.php](http://www.ub.edu/grelic/eng/index.php)

The screenshot shows the SciE-Lex website interface. At the top right, it says 'Diccionario Electrónico de Combinaciones Léxicas en el Inglés Científico' and 'SciE~Lex info'. Below this is a navigation bar with 'Discourse functions' selected. On the left is a vertical menu with a list of discourse functions. The main content area displays the selected function, 'Comparing and contrasting', with a list of associated phrases.

ABCDEF GHIJKL MNOPQR STUVWXYZ

Discourse functions

Diccionario Electrónico de Combinaciones Léxicas en el Inglés Científico

SciE~Lex info

Acknowledging funding  
Adding information  
Addressing the reader  
Agreeing  
Bringing the reader's attention to a point  
Bringing the reader's attention to a point & exemplifying  
Comparing and contrasting  
Describing co-occurrence  
Describing materials  
Describing materials and/or procedures  
Describing mechanisms  
Describing procedures  
Describing qualities  
Drawing conclusions  
Drawing conclusions & Hedging  
Expressing cause  
Expressing certainty  
Expressing certainty & Describing qualities  
Expressing conditions  
Expressing conditions & Framing  
Expressing contrast  
Expressing effect  
Expressing exceptions  
Expressing general knowledge  
Expressing lack of condition

**Comparing and contrasting**

to the same extent  
there was no difference  
no significant difference in  
no significant difference between  
When compared with  
as compared with  
in comparison with  
a comparison of  
was not significantly different

# Conclusion

- Specialised discourses have **predictable features**
- **ESP writing is unique, but not difficult to master**
- **Corpus-based methodologies** contribute to:
  - students getting familiar with the **language prototypical of a discourse community**
  - the **design of tailor-made materials** for non-linguistic educational programmes

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