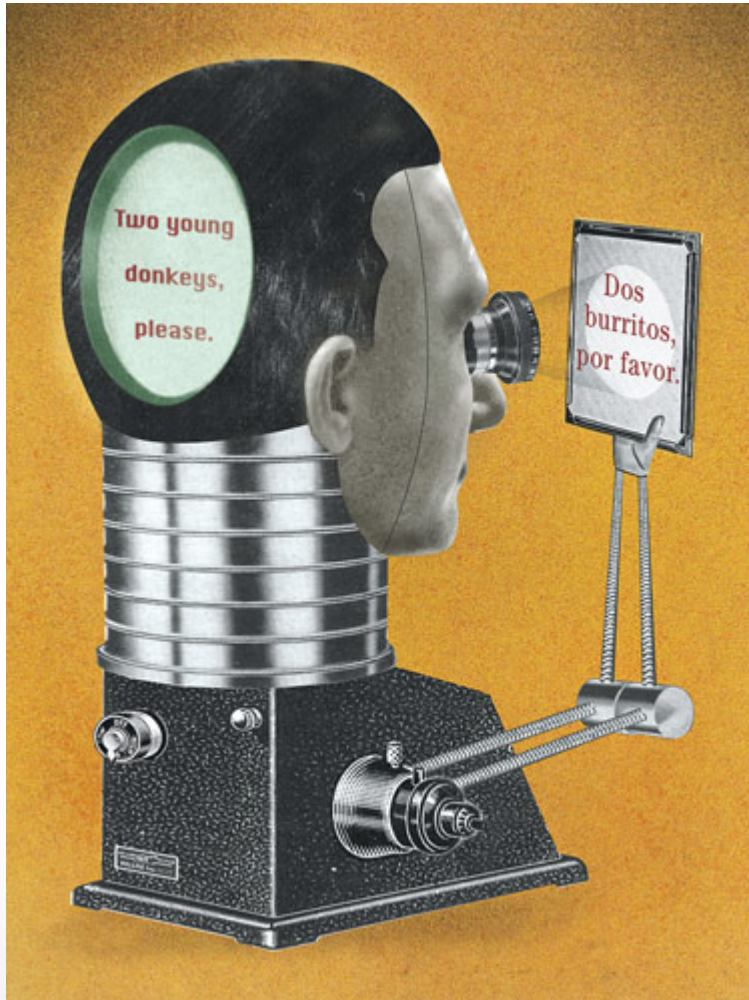
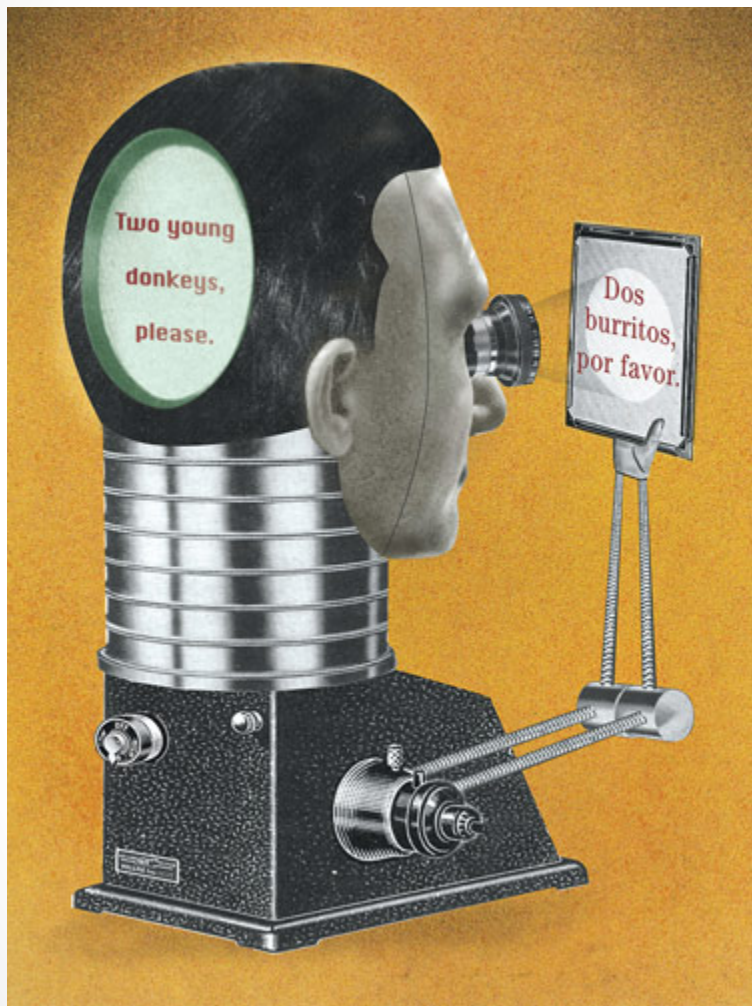


# The Elephant in the Room

Machine Translation in Language Learning  
at Duke University



**Joan Clifford**  
**Lisa Merschel**  
**Joan Munné**  
**Deb Reisinger**



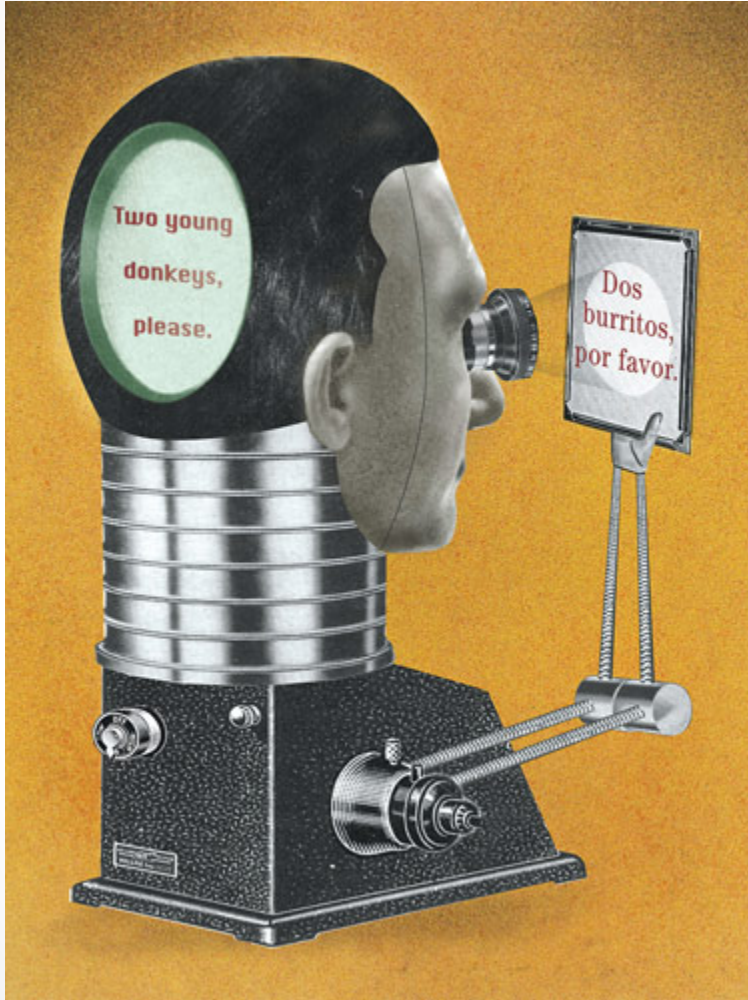
“Une poitrine de tiroirs”

“Matadores de penas”

“Voy a estar derecha  
espalda”

“Un ventilateur de  
sports”

# definition



“a translation carried out  
by a computer”

*-Oxford dictionary*

= one word

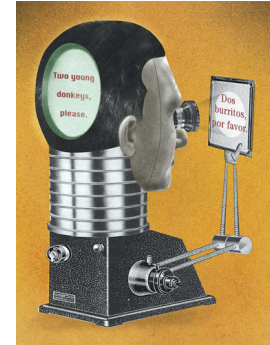
= series of words

= sentences

= paragraphs ...

# Discussion Questions

- What is MT?
- How do students use MT?
- How do they perceive the usefulness of MT?
- What do instructors think of MT and language learning?
- What are the implications on the Duke Community Standard?



# Spring 2012 Survey: Who participated? (905 total participants)



Language	Total Enrolled	Total Respondents	Rate of Response
Italian	321	218	68%
French	265	240	90.5%
Spanish	554	417	75%
Portuguese	37	30	81%



Have you used MT to support your language learning for this class (in class, outside of class)?

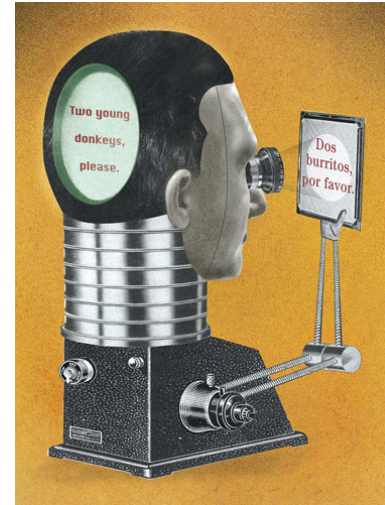


Answer	Responses	%
Sometimes	354	39%
Often	287	32%
Rarely	158	17%
Never	104	12%
Total	903	100%

# I use MT to translate

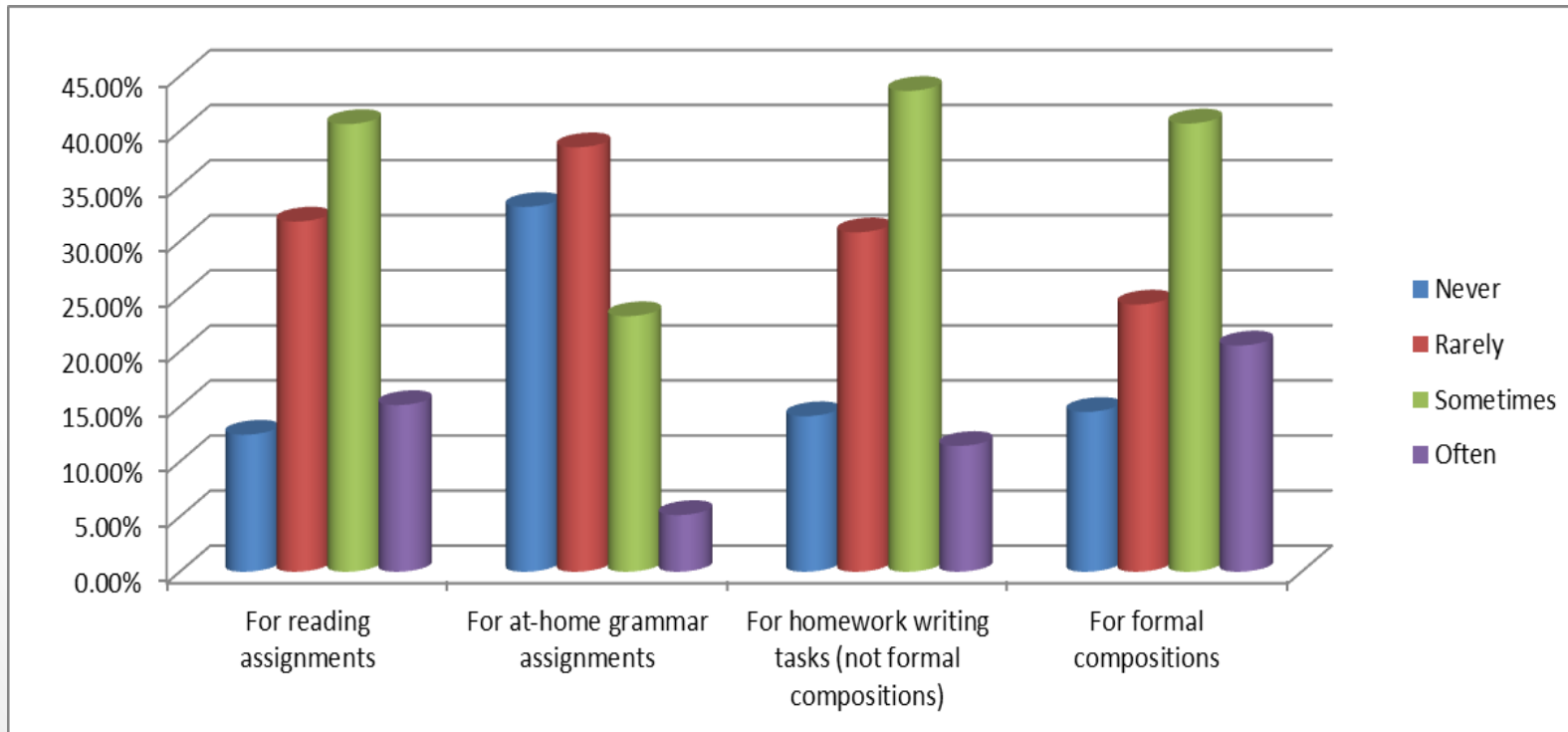
\_\_\_\_\_.

(check all that apply)



Answer	Responses	%
individual words	695	89%
short phrases of 5 words or less	489	62%
full sentences	122	16%
short paragraphs	52	7%
other (please explain)	32	4%

# How often have you used MT?





# Do you find MT helpful in learning?



Answer	Responses	%
Sometimes helpful	494	63%
Always helpful	242	31%
Rarely helpful	46	6%
Never helpful	1	0%

In what way or ways do  
you find it helpful?  
(check all that apply)



Answer	Responses	%
helps increase vocabulary	660	85%
increases my grammatical accuracy	365	47%
saves time	337	44%
builds confidence	250	32%
improves my grade	221	29%
produces more native-like language	123	16%

Based on your experience with MT, when<sup>x</sup> is it most useful or appropriate to use this tool? Choose all that apply.

Answer	Responses	%
as a dictionary	510	66%
while-writing	341	44%
double-checking what you wrote in the Foreign Language	333	43%
pre-writing	322	42%
editing	312	40%
reading comprehension of a text	308	40%
reading directions	296	38%
revising	191	25%
preparing oral assessments	119	15%

Have you ever detected an error in MT?



Answer	Responses	%
Yes	714	91%
No	69	9%
Total	783	100%

# 1: Personal knowledge of language

“I know what the sentence or words should be and they don't quite match up”

“Based on my studying of the language, I am able to detect errors in verb conjugations and other grammatical areas”

“I recognized them as my knowledge of Italian improved.”

## 2: Contradiction of textbook

“It didn’t  
match what  
was in the  
text”

“Because my knowledge  
of French grammar  
agreements and the  
definitions in the  
textbook said they were  
wrong”

“It was not  
necessarily an error, it  
just doesn't match  
completely with what  
we have learned in  
class or what the  
book says”



### 3: Contradiction of what was learned in class or taught by instructor

“It translated something differently than what I was taught in class”

“Word placement different from previously taught order in class”

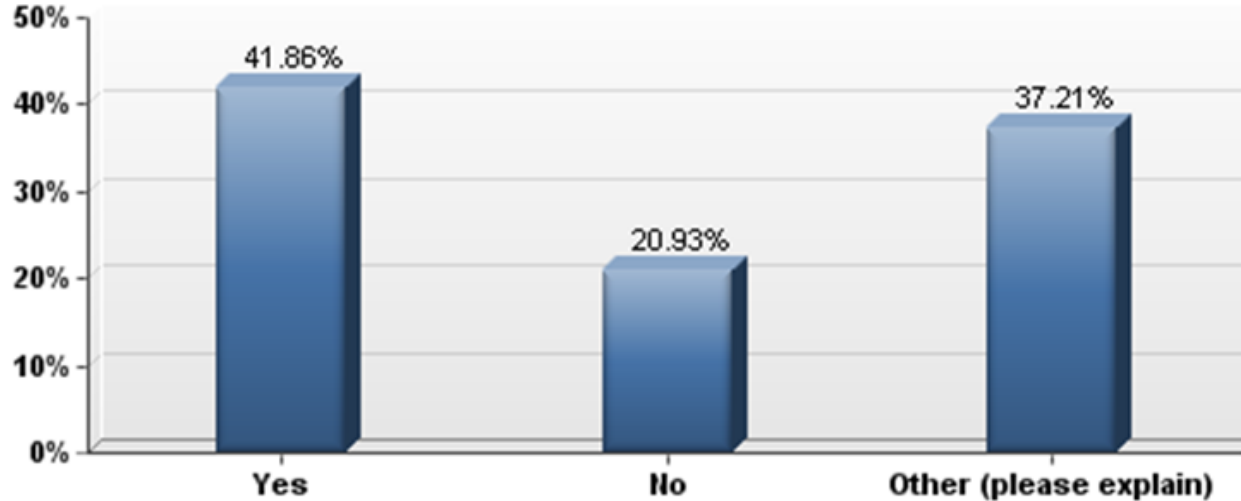
“Because we had learned about the error”

“Different from what we learned in class. Checked another MT sight and was different.”

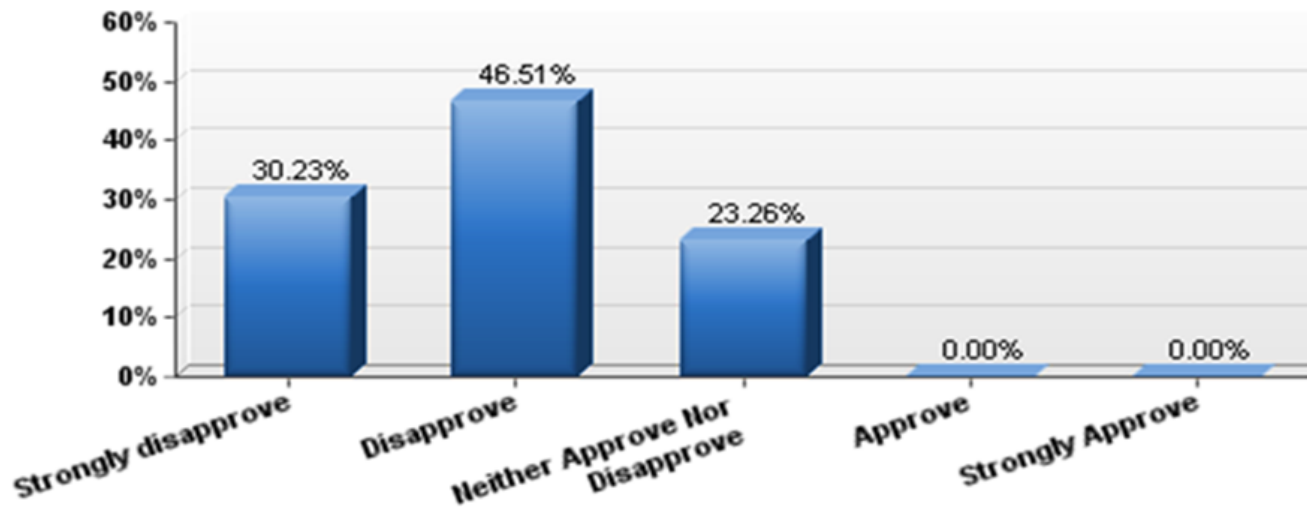
# Instructors' perceptions of MT

Rank	<ul style="list-style-type: none"><li>• Tenured/ Tenure track</li><li>• Regular-rank instructor/ Lecturer</li><li>• Visiting faculty/ Adjunct</li><li>• Other</li></ul>	<div>35%</div> <div>49%</div> <div>9%</div> <div>7%</div>
Teaching experience	<ul style="list-style-type: none"><li>• 1-3 years</li><li>• 4-10 years</li><li>• 11 or more years</li></ul>	<div>5%</div> <div>9%</div> <div>86%</div>
Levels primarily taught	<ul style="list-style-type: none"><li>• Elementary</li><li>• Intermediate</li><li>• Advanced</li></ul>	<div>52%</div> <div>76%</div> <div>69%</div>
Languages taught	<ul style="list-style-type: none"><li>• Spanish</li><li>• French</li><li>• Italian</li><li>• Portuguese</li></ul>	<div>70%</div> <div>19%</div> <div>9%</div> <div>2%</div>

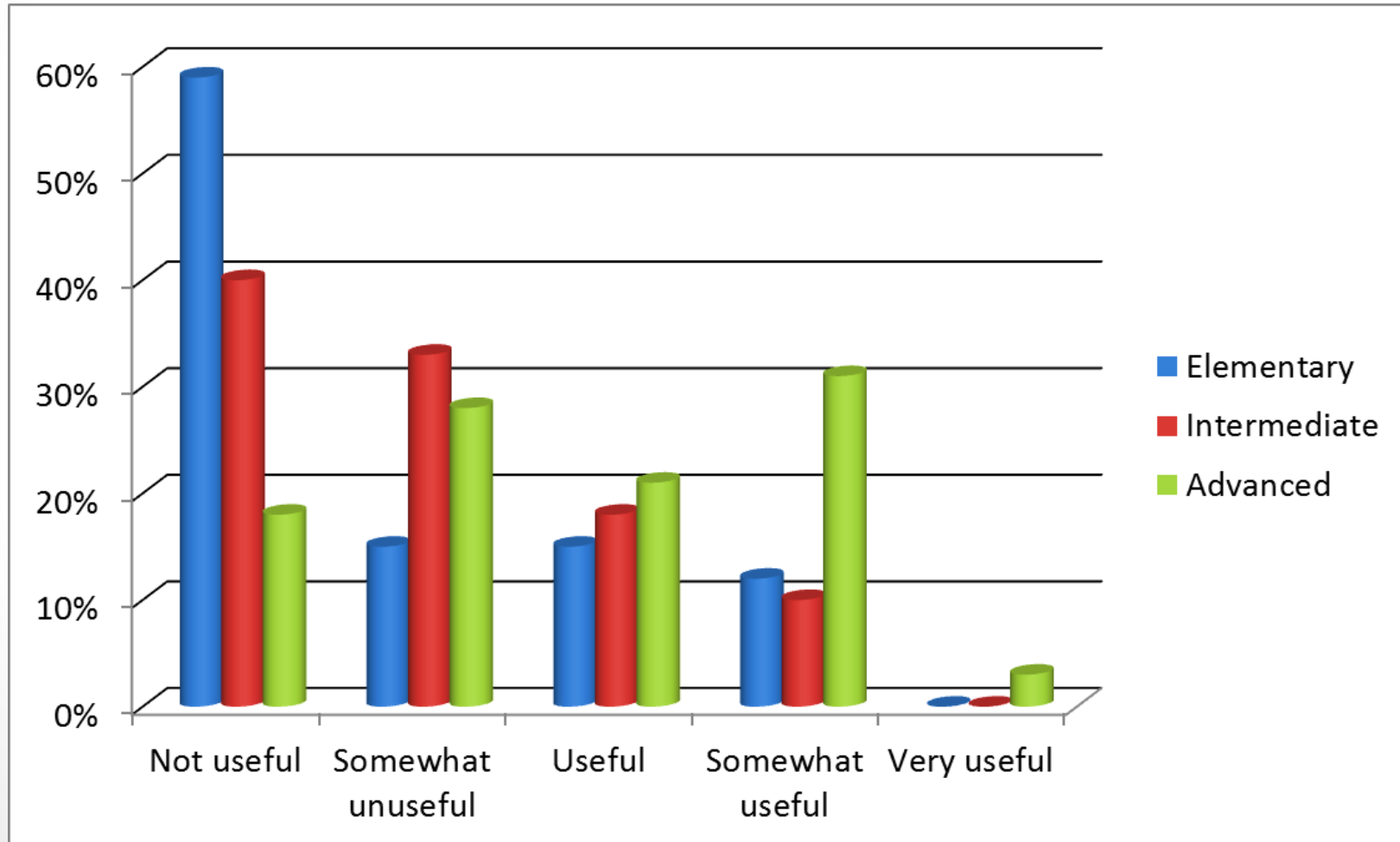
# Do you equate a student's use of Machine Translation with cheating?



# To what degree do you approve the use of MT by your students?



# How useful is MT for the language learning process in the \_\_\_\_\_ level?



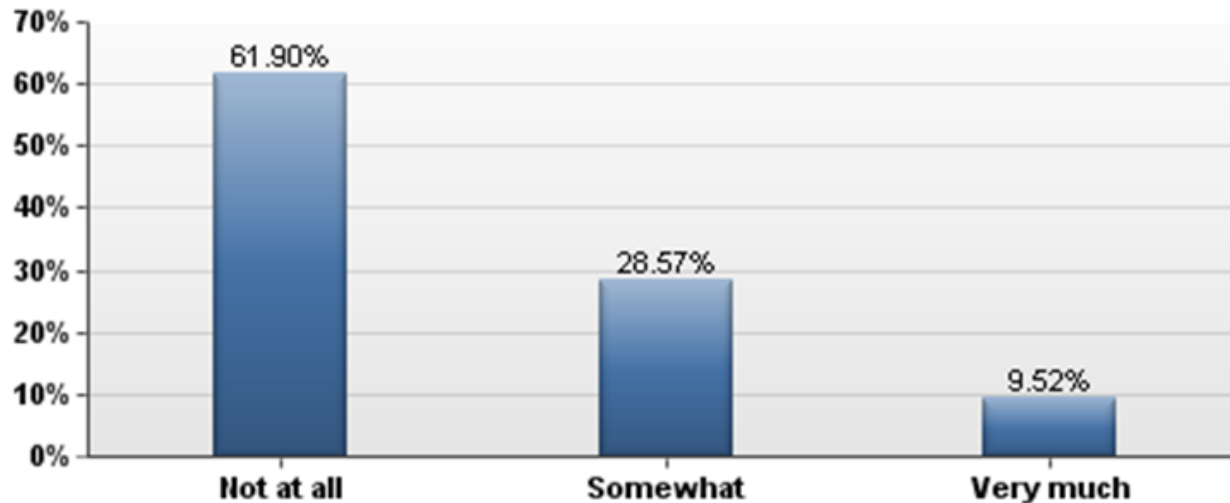
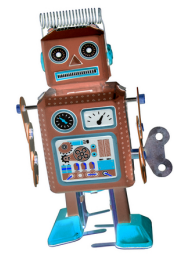
# Do you find MT a useful tool for language learning?



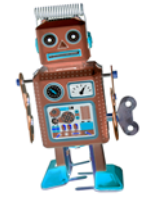
Yes	<p><b>“Helpful in writing courses or when reading.”</b></p> <p><b>“It is quicker than a dictionary and doesn’t interrupt the flow of the students’ speech.”</b></p>
No	<p><b>“If it works, the job is done for the student. If it is not correct, the student is exposed to incorrect input presented as correct.”</b></p> <p><b>“Learners rarely possess the knowledge necessary to judge the output of an MT and so cannot reject it when it is wrong or learn from it when it is right</b></p>
Depends	<p><b>“Could be, if students are well directed to how and when to use it.”</b></p> <p><b>“For difficult or problematic phrases.”</b></p> <p><b>“It can assist students with their learning...It exposes the students to structures in the two languages. Through it they can get some focus on form....raises awareness of language use.”</b></p> <p><b>“Well used, it could help to learn vocabulary, syntax...”</b></p>



# To what degree does MT threaten the second language teaching profession?



# What role do you think MT will play in the future of the second language teaching profession?



- “I think it will get hard and harder to ensure that writing is, in fact, a student's own work. That troubles me. That they won't develop as writers (think: calculators and basic math...)”
  - “...MT is no comparison to how the human brain processes language.”
- 
- “It has great potential... we as educators need to realize the difference between tools that are threatening and tools that are - potentially - useful... we need to change our viewpoint and figure out how to use them to our advantage.”
  - “I think we need to learn how to accommodate its existence and work with students on the best way to use MT”
  - “It’s just another learning tool.”

# Looking ahead...

- Larger Questions and Future Research
- How to empower students and present best practices in the use of MT at different stages of language development
- Examine current policies on MT in our language programs
- “In my written assignments I will not use any computer software that compromises my learning process. This includes translation programs.”

# What do we really need to know?

- “English’s emergence as the global language, along with the ***rapid progress in machine translation*** make it less clear that the substantial investment necessary to speak a foreign tongue is universally worthwhile.” *Former Harvard University President Larry Summers*

Summers, Lawrence. “What you (Really) Need to Know.” *New York Times* 20 Jan. 2012. Web.

