

# Discutir diferenças para reduzir desavenças

Catherine E. Snow  
Harvard Graduate School of Education

# Algumas pessoas que contribuíram

## Time Curriculum:

- Claire White
- Halley Wheelless,
- Alyse Krantz
- Matt Ellinger

## Time WG RTC:

- Juliana Pare-Blagoiev
- Joshua Lawrence

## SERP

- Suzanne Donovan

## Time CCDD:

- Kurt Fischer
- Bob Selman
- Paola Uccelli
- Maria LaRusso
- Leslie Duhaylongsod
- Tracy Elizabeth
- Cathy O'Connor
- Ha Yeon Kim

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**E MUITAS MAIS**

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- Joshua Lawrence

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- Tracy Elizabeth
- Cathy O'Connor

## SERP

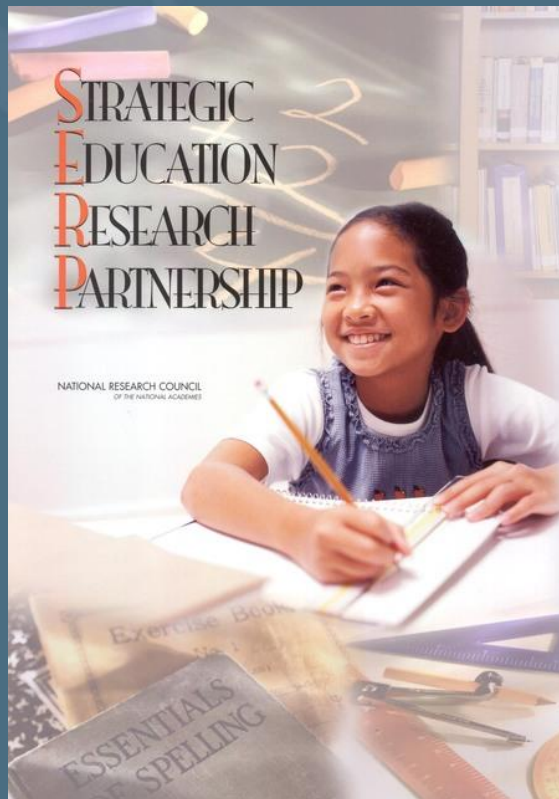
- Suzanne Donovan

## Time CCDD:

# Primeiramente

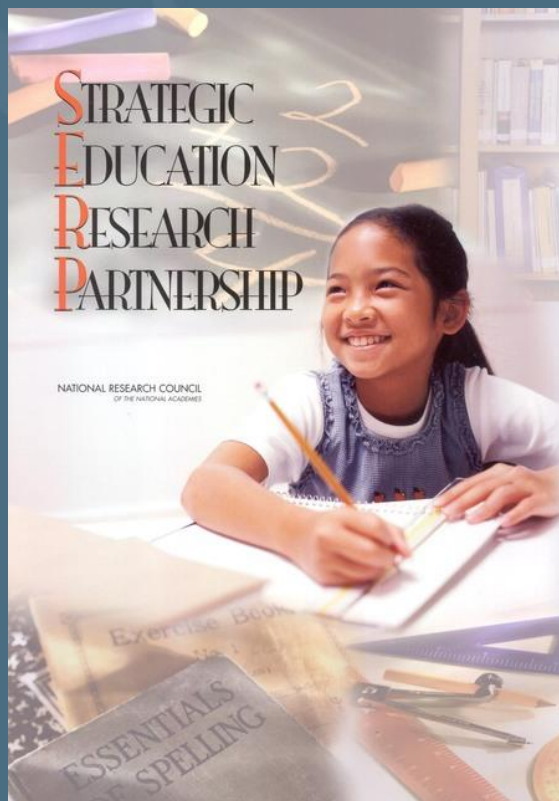
- Uma história
- Com uma epifania embutida
- Que leva a uma agenda

# As Origens do SERP



S E R P

# As Origens do SERP



Não fazemos pesquisa translacional  
Nós fazemos pesquisa incorporada,  
começando com parcerias para  
identificar problemas urgentes da prática

S E R P

# As Origens do Word Generation





# As Origenes do Word Generation





# Word Generation: Uma intervenção curricular em várias versões

- Design original para Escolas Públicas de Boston
- Modificado embasado em feedback dos professores
- Modificado posteriormente para Alunos de Língua Inglesa
- Expandido e estendido radicalmente para a versão atual

# Word Generation: Um Programa Acadêmico de Vocabulário

## Limitações de Design da Pesquisa:

- Múltiplas exposições recorrentes
- Necessidade de ouvir palavras em contextos variados
- Oportunidades para usar as palavras ao falar e escrever
- Alguns direcionaram ensino direto
- Estratégias de aprendizagem de palavras
  - Análise morfológica
  - Atenção à polissemia
  - Atenção à etimologia / cognatos

# Word Generation: Um Programa Acadêmico de Vocabulário

## Limitações de Design da Realidade:

- Compartilhar a responsabilidade entre todos os professores das áreas de conteúdo, não apenas dos professores de Língua Inglesa e Artes
- Limitar o tempo retirado do "trabalho necessário" para se concentrar na linguagem ou nas habilidades gerais de alfabetização
- Assegurar a respeitabilidade disciplinar em matemática, ciências e atividades de estudos sociais (incluindo mapas, gráficos, figuras)
- Criar flexibilidade no programa para facilitar viagens para outros sites

# Conteúdo do Word Generation

O governo deve impor um ano obrigatório de serviço após o ensino médio?

As escolas devem proteger as crianças do cyberbullying?

O uso de alimentos transgênicos deve ser regulamentado?

As escolas devem exigir uma média mínima para participar de uma equipe esportiva?

Deveria ser obrigatório obter uma licença de parentalidade?

ENQUANTO QUE INFLUÊNCIA ESTABELECE FATOR

PREDOMINANTE RECUSAR ESPECULAR

FUTURO PREVALECER INTRÍNSECO DURAÇÃO

ESTRATÉGIAS PRESCREVER FACILITAR COMPONENTE DESIGN

PERSEGUIR CONFIAR DESACOMPANHADOS COMPILAR

ANONIMO INSTITUTO ECONOMICO PLAUSÍVEL BANIDO

INTERAGIR MEDIAR ADQUIRIR APTIDÕES

DISTRIBUIÇÃO CÍVIDO ORIENTAR MANTER

NEGAR ABORDAGEM SUSTENTAR POLÍTICA ATRIBUTO

CORPORAL PRERREQUISITO REFORÇAR REGULAR PREDIZER AVALIAR

DISCRIMINAR VARIÁVEL



Segunda—  
Introduzir  
palavras  
na aula de  
Língua  
Inglesa e  
Artes

Terça—  
Atividade  
de mate-  
mática com  
as palavras-  
alvo

Quarta—  
Debate  
em  
estudos  
sociais

Quinta—  
Atividade  
de ciências  
com as  
palavras-  
alvo

Sexta—  
Atividade  
de escrita

# Word Generation:

## Dados que chamaram a nossa atenção nas Escolas Públicas de Boston

- Duas escolas
- Uma ansiosa, uma relutante
- 12 semanas de implementação
- Dados bastante ricos



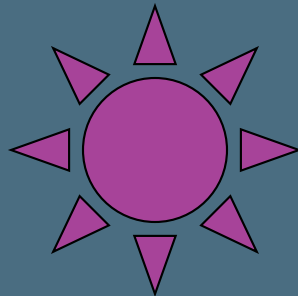
# Ano I Escolas-Piloto

## Westfield

### Middle School

- 80 % Negros
- 16% Hispânicos
- 1.8% Brancos
- 1.6 % Asiáticos
- 29% Educação Especial
- MCAS

(Massachussets  
Comprehensive  
Assessment System)



## Reilley

### Middle School

- 62% Negros
- 18.1 % Hispânicos
- 9.3% Brancos
- 8.9 % Asiáticos
- 25% Educação Especial
- MCAS

(Massachussets  
Comprehensive  
Assessment System)



S E R P

# Resultados do Teste C-B

		Porcentagem média correta 1as Palavras (12 semanas)	
Ano	n	Pré	Pós
Sexto	29	65.09	77.82
Sétimo	46	68.20	82.75
Oitavo	64	74.67	85.02
Sexto	104	68.28	77.02
Sétimo	109	72.24	79.04
Oitavo	120	75.03	83.96



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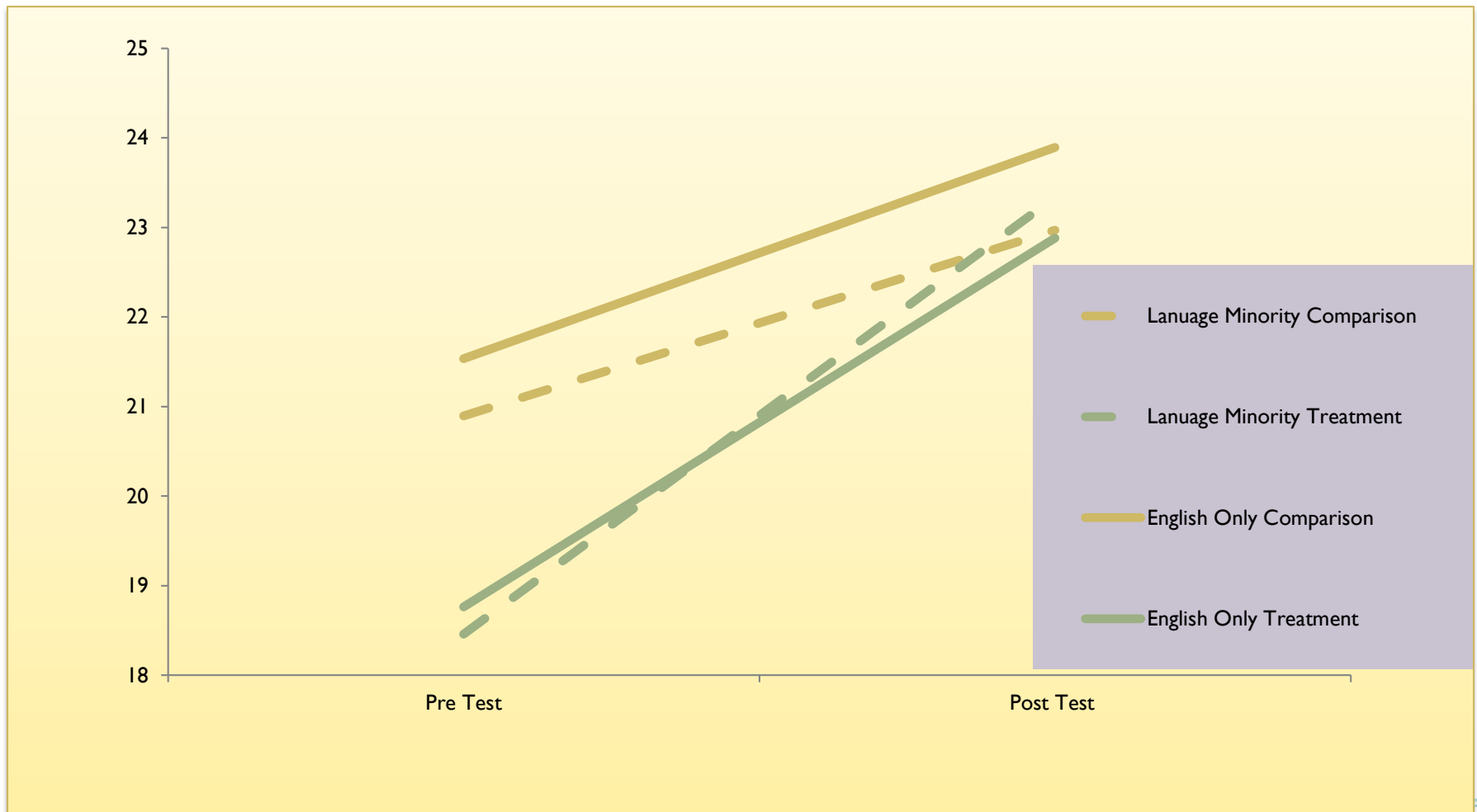
# Word Generation:

## Dados que sustentaram a expansão

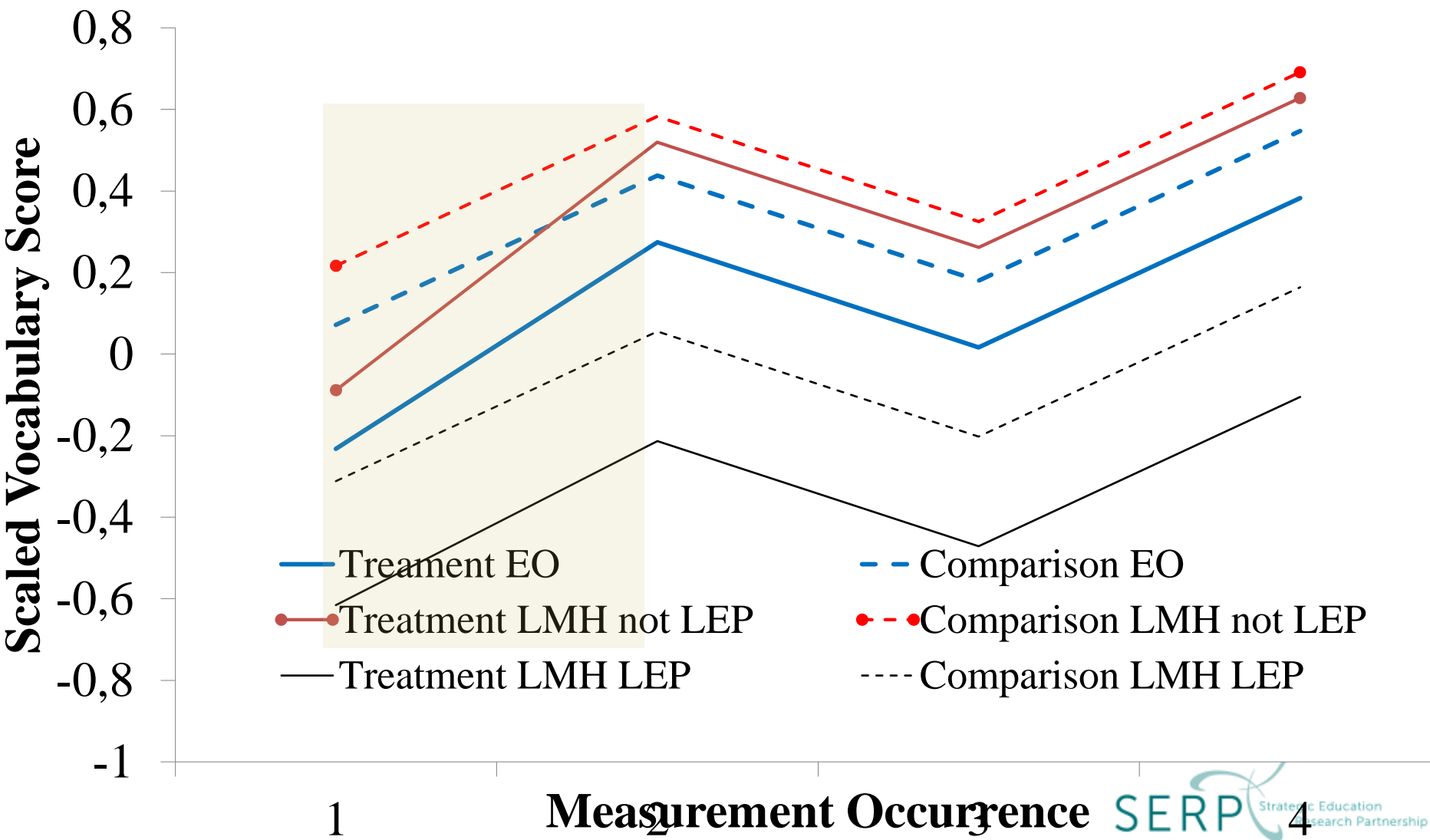
- Seis escolas de implementação, moderadamente ansiosas
- Seis escolas de controle, nem um pouco ansiosas
- Dados demográficos disponíveis limitados

# Estudantes apenas de língua inglesa e minorias linguísticas em escolas com o programa Word Generation e escolas comparativas, 2007-2008

Snow, C., Lawrence, J., & White, C. (2009). Generating knowledge of academic language among urban middle school students. *Journal of Research on Educational Effectiveness*, 2(4), 325-344.



# Learning, Slippage, Relearning

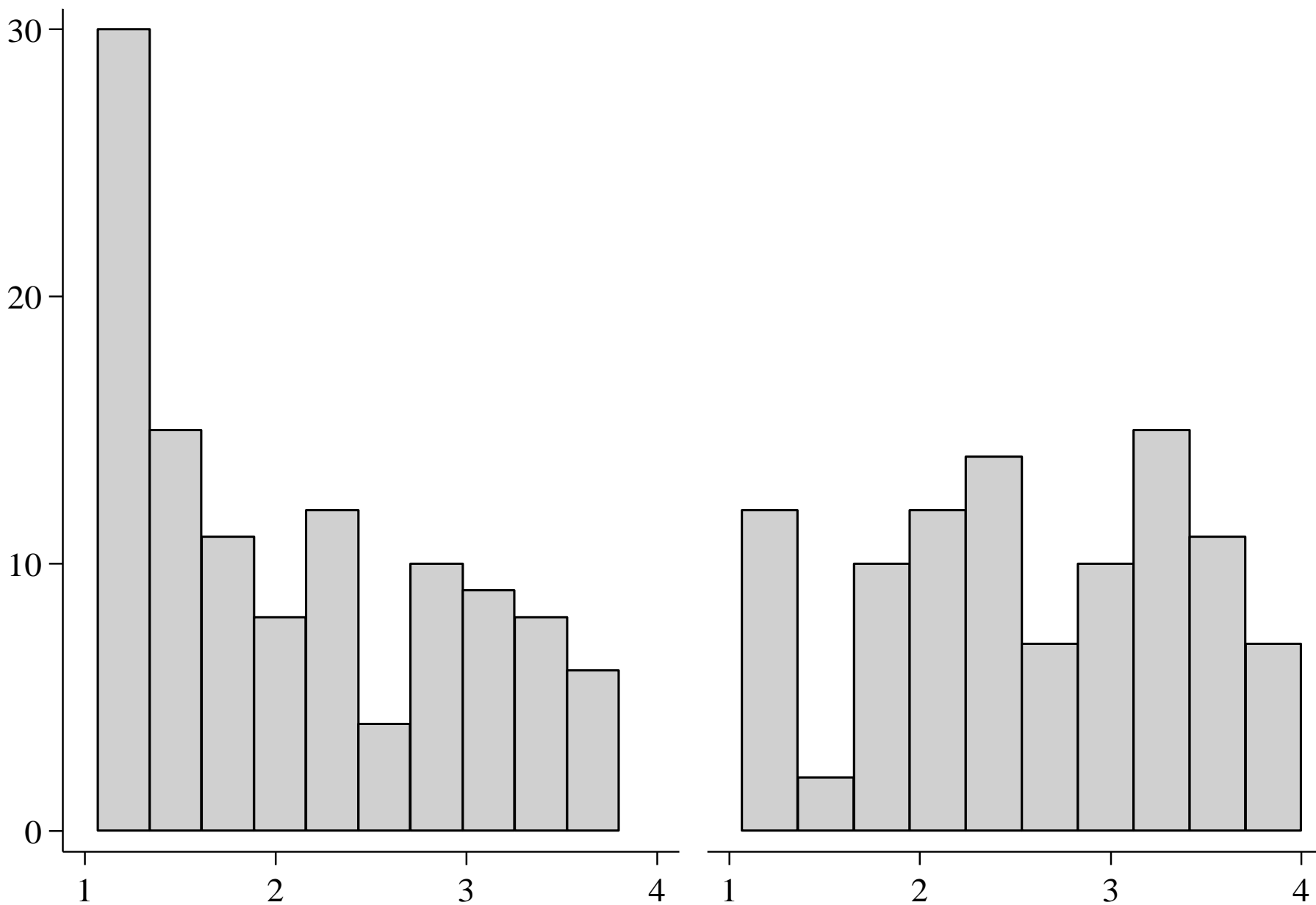


# Ensaio Controlado Aleatório do Word Generation: Os desafios e o que as discussões permitiram



Control Schools

Word Generation Schools



Composite Discussion Quality Rating

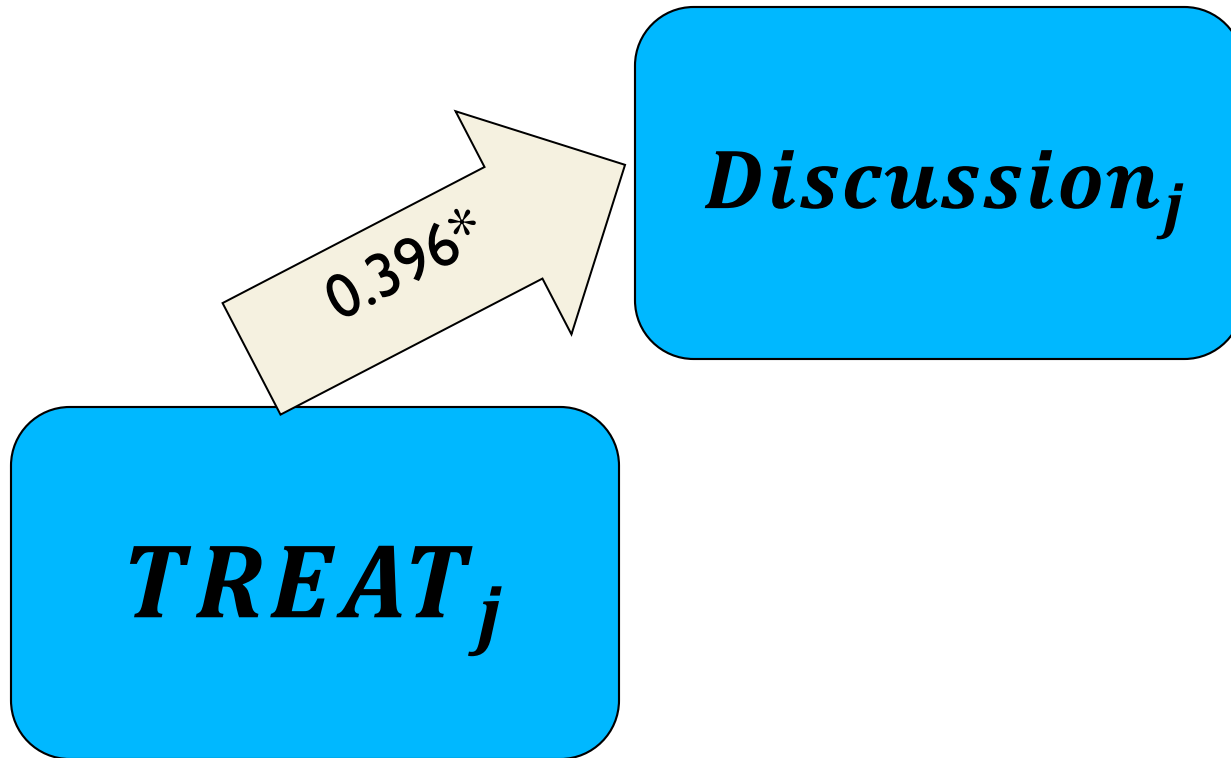
Conteúdo-Área Observada	Escolas Controle		Escolas Word Generation		Total		Diferença (WVG - Escolas Controle)	Tamanho do Efeito (Cohen's d)
	Média	n	Média	n	Média	n		
Matemática (n = 48)	1.85 (0.80)	25	2.90 (0.84)	23	2.35 (0.97)	48	+ 1.05	1.08
Ciências (n = 47)	1.85 (0.85)	27	2.28 (0.93)	20	2.03 (0.90)	47	+ 0.43	0.47
Estudos Sociais (n = 54)	2.24 (0.83)	24	2.59 (0.86)	30	2.43 (0.86)	54	+ 0.35	0.41
Língua Inglesa e Artes (n = 63)	2.26 (0.89)	36	2.55 (0.73)	27	2.39 (0.82)	64	+ 0.29	0.35
Total (n = 213 )	2.07 (0.86)	113	2.59 (0.85)	100	2.31 (0.89)	213	+ 0.52	0.58

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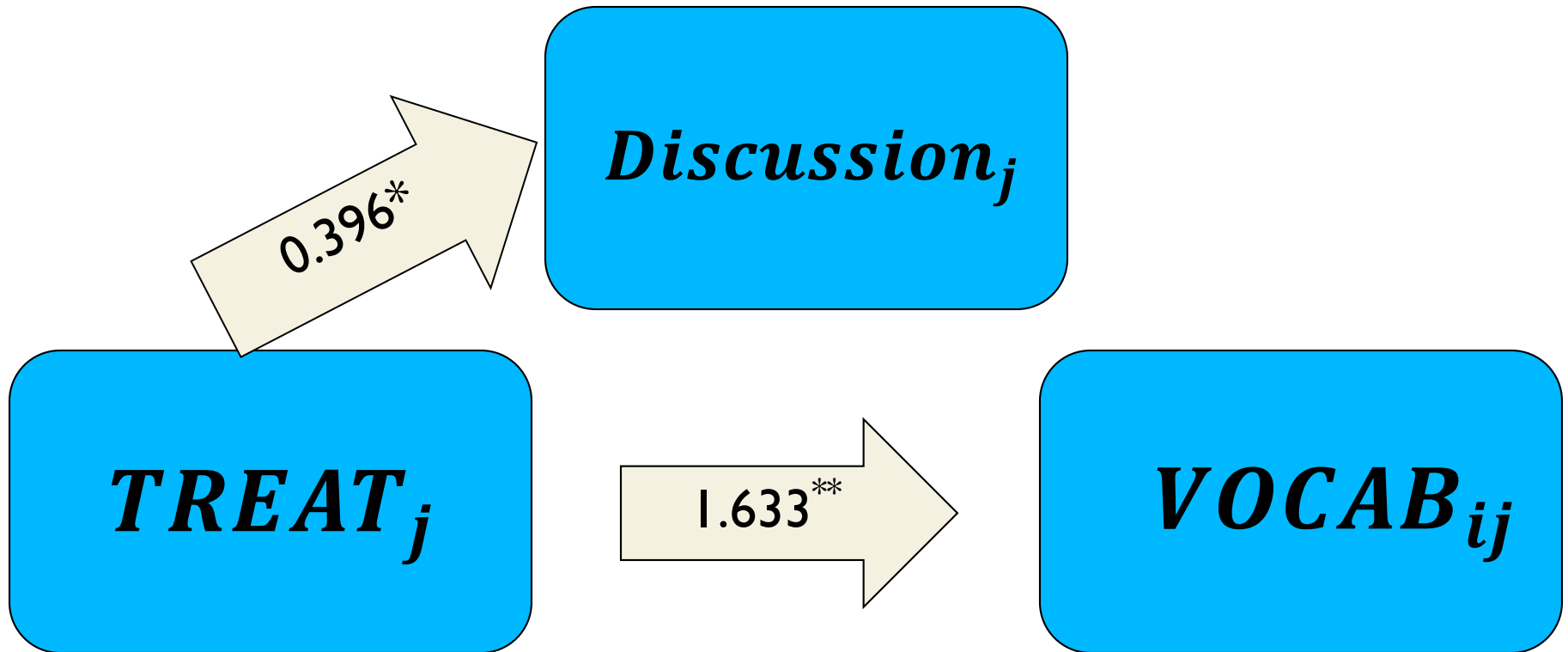
# Tamanhos do Efeito (Nível dos Alunos)

Medida de Resultado	Média Geral da Amostra			Controle				Word Generation				$\delta T - \delta C$	Tamanho do Efeito
	Pré	Pós	n	Pré	Pós	n	$\delta C$	Pré	Pós	n	$\delta T$		
Vocabulário Acadêmico	18.58	19.94	1540	18.04	18.8	618	0.76	18.94	20.7	922	1.76	1.00	0.16
	(6.21)	(7.08)		(6.02)	(6.83)			(6.21)	(7.14)				
Vocabulário Gates-MacGinitie	505.26	510.9	1400	501.54	508.44	570	6.9	507.5	512.59	830	5.05	-1.85	-0.06
	(32.46)	(35.0)		(33.49)	(36.37)			(31.6)	(33.87)				

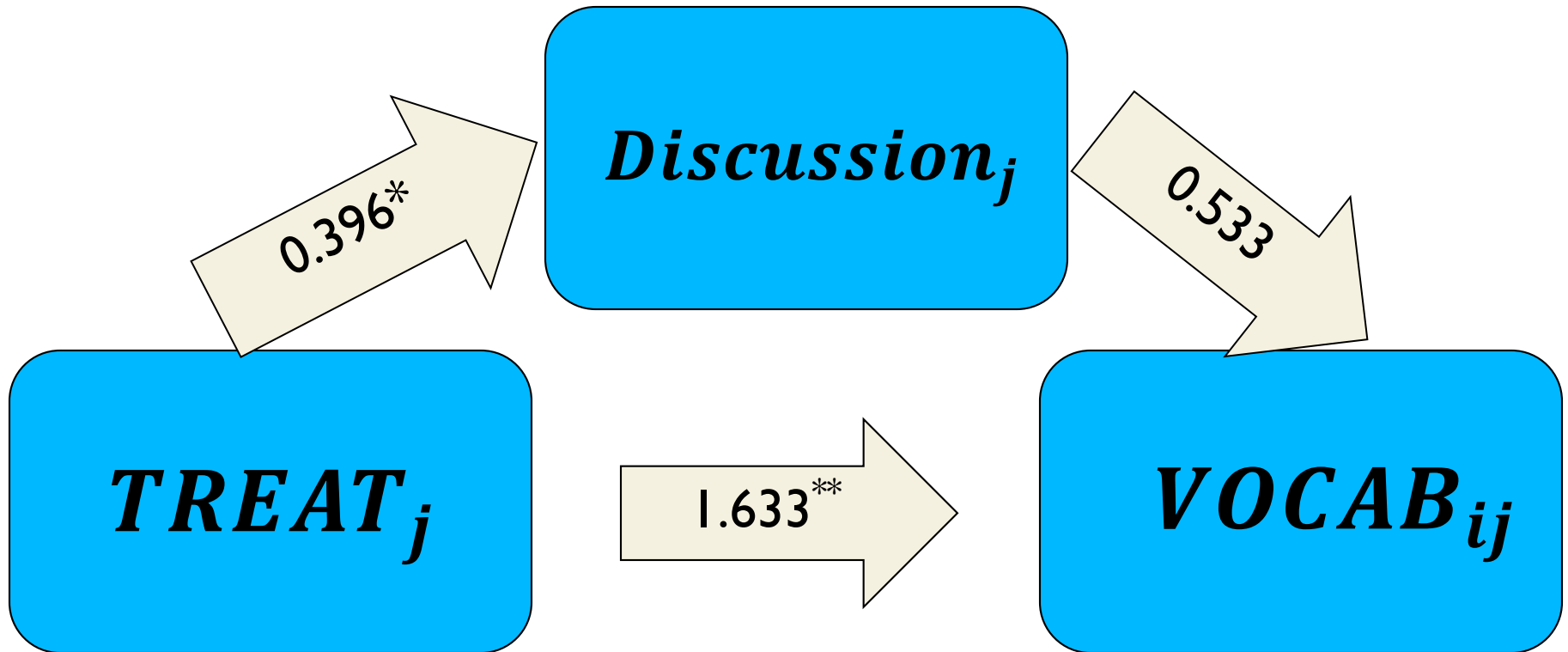
# Modelo de Mediação Multinível



# Modelo de Mediação Multinível

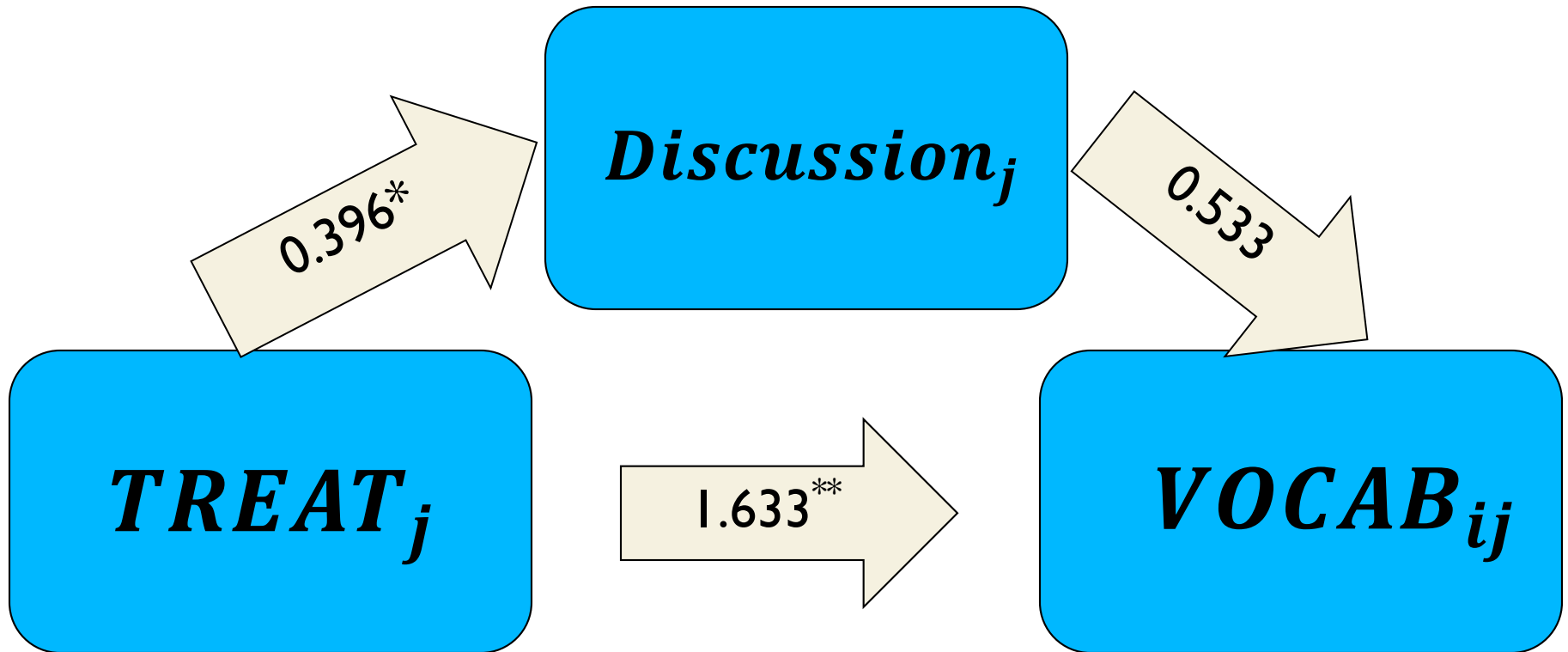


# Modelo de Mediação Multinível





# Modelo de Mediação Multinível



*Efeito indireto* =  $.396^* \cdot 0.533 = .211$

*Efeito total* = *efeito indireto* + *efeito direto* =  $0.211 + 1.28 = 1.48$

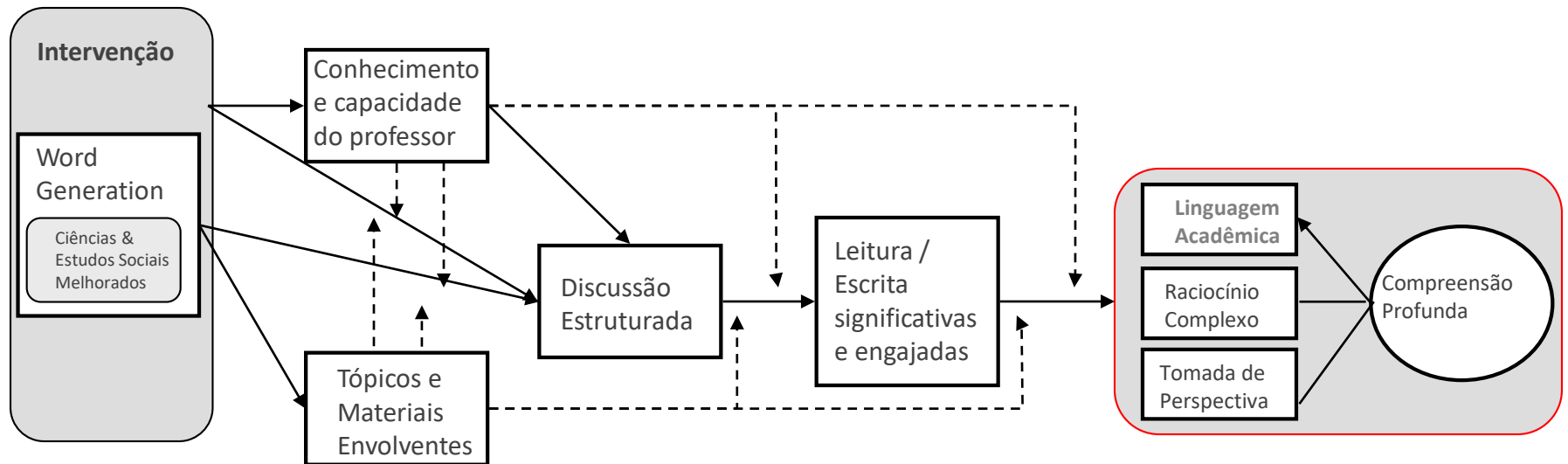
# Conclusões provisórias

- Mudanças nos materiais curriculares podem melhorar a discussão, o que, por sua vez, melhora o vocabulário acadêmico.
- Um programa gratuito ou com "custo de implementação" baixos pode ter efeitos confiáveis.
- A proporção do efeito total do Word Generation mediada pela da discussão melhorada é de 0,14.

# Word Generation RFU: Teoria da Ação Ampliada [e financiamento]

- Por meio do poder da discussão, vimos a oportunidade de melhorar nos alunos:
  - O engajamento
  - A tomada de perspectivas
  - O raciocínio
  - A linguagem acadêmica
- Então nós construímos esses fatores em um currículo
- Para ver se podemos promovê-los mais poderosamente
- E assim melhorar a compreensão de leitura

CCDD Theory of Change, Adapted from Grant, Figure 2.



# Word Generation

## Ler para Entender:

### Curriculum Expandido / Estendido

- Começar mais cedo
- Torná-lo mais intensivo
- Alinhar com os padrões: do distrito / do estado / nacional

# Word Generation - Ler para Entender: Conjunto Expandido de Constructos Relevantes

- Linguagem acadêmica
- Tomada de perspectiva
- Raciocínio
- Compreensão profunda
  
- Vocabulário baseado no currículo
- Qualidade de escrita baseada no currículo
- E qualidade da discussão em sala de aula

# A visão simples da leitura

Decodificação x  
Compreensão oral



Compreensão  
de leitura

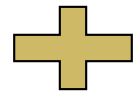
# A visão simples atualizada

Decodificação x  
Compreensão oral

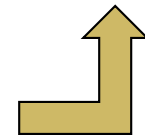


Compreensão  
de leitura

Compreensão de  
Leitura Simples



Linguagem Acadêmica  
Tomada de perspectivas  
Argumentos complexos



Compreensão  
profunda de  
leitura



word

generation

# Três Preditores

Raciocínio  
Complexo

Raciocínio sobre investigação, evidência, verdade, conhecimento,  
Raciocínio, conflito e deliberação;  
a capacidade de pensar de forma eficaz sobre questões complexas  
Que não têm uma única resposta correta

Tomada de  
Perspectiva

Reconhecimento de que diferentes atores têm experiências diferentes dos mesmos eventos e a capacidade de entender e de navegar nessas diferentes perspectivas

Linguagem  
Acadêmica

Formas de linguagem e estruturas usadas frequentemente em ambientes escolares caracterizadas por atributos gramaticais que aumentam a carga de processamento ao ler ou escutar

# Compreensão de Leitura Preditiva

- Nós exploramos preditores de resultados de compreensão de leitura (GISA - Avaliação Integrada Global de Estudantes)
- Para testar nossa expansão na Visão Simples
- Com 2933 alunos de 12 escolas

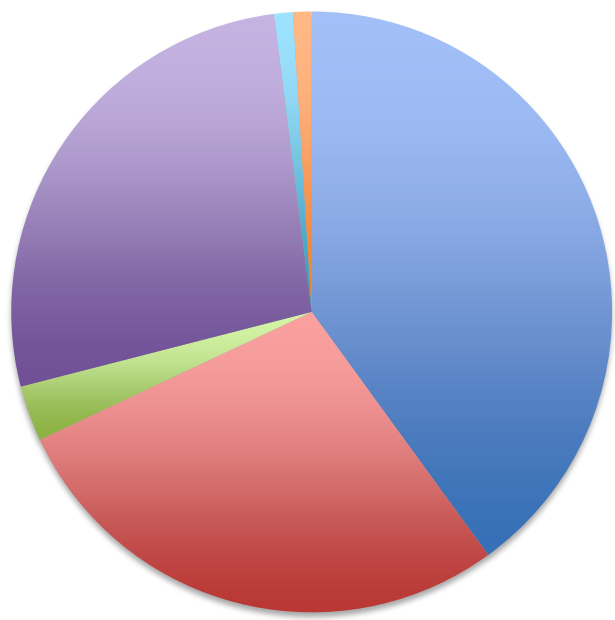
word

generation

# Amostra do Estudo

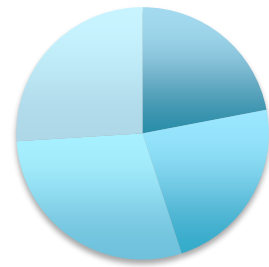
2933 Alunos Contole de 12 Escolas

### Race



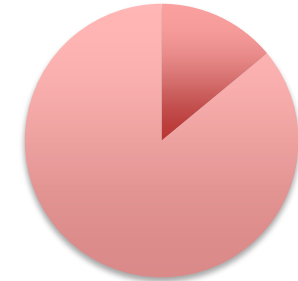
- Black
- White
- Asian
- Latino
- NA/PI
- Mixed/Other

### Grade



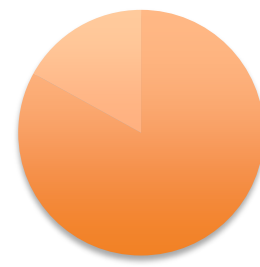
- Grade 4
- Grade 5
- Grade 6
- Grade 7

### Special Education



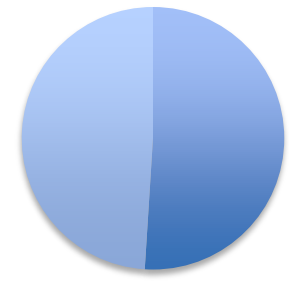
- Special Education
- Not Special Education

### Free/Reduced Price Lunch



- Eligible
- Not Eligible

### Gender

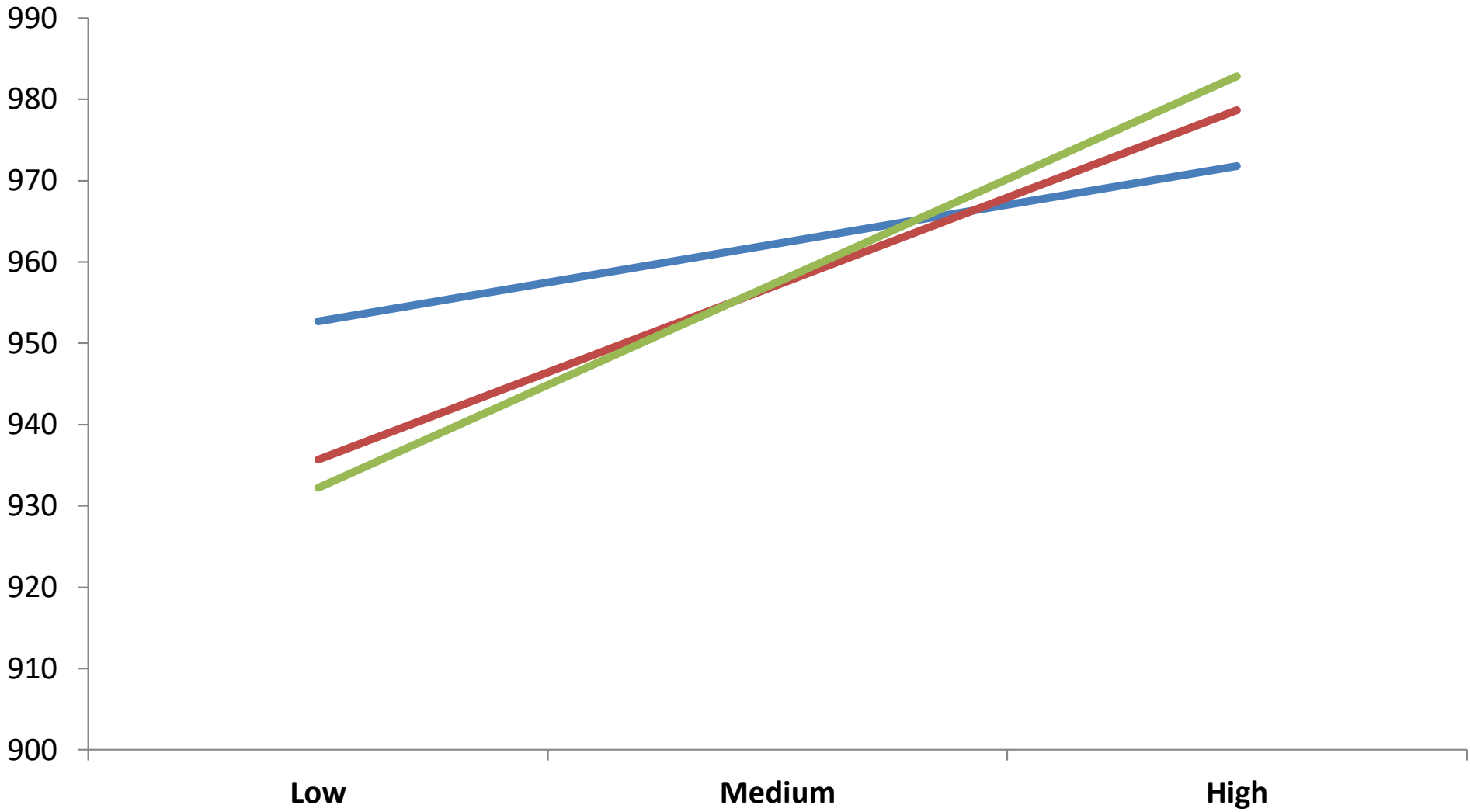


- Female
- Male

word

generation

# Escores de Compreensão Profunda de Estudantes com Baixa, Média e Alta Tomada de Perspectiva e Habilidades de Linguagem Acadêmica (N = 2933)

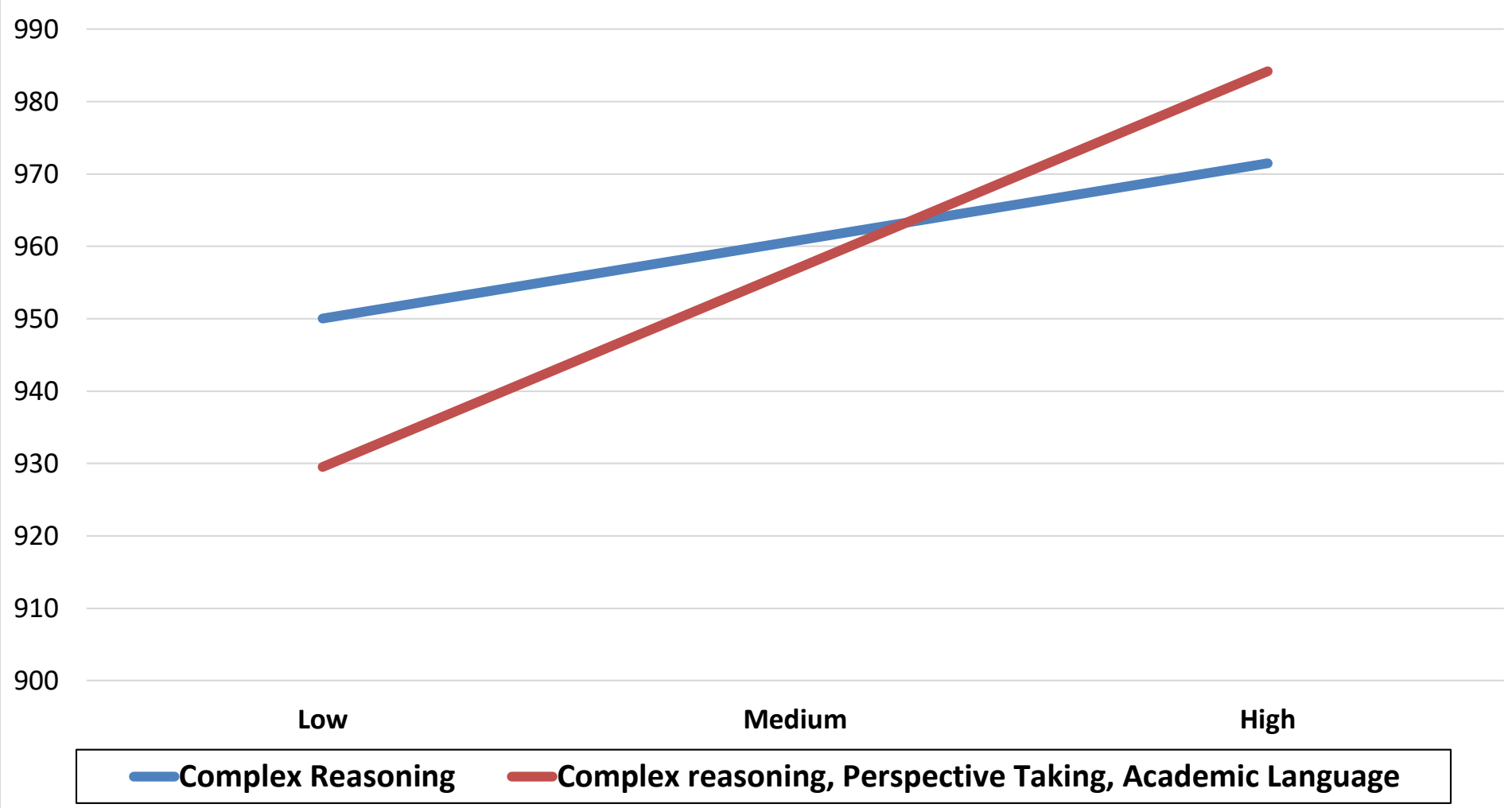


— Perspective Taking Skills — Academic Language — Perspective Taking + Academic Language

word

generation

# Escores de Compreensão Profunda de Alunos com Baixo, Médio, Alto Raciocínio Complexo, Tomada de Perspectivas e Habilidades de Linguagem Acadêmica (n = 1965)

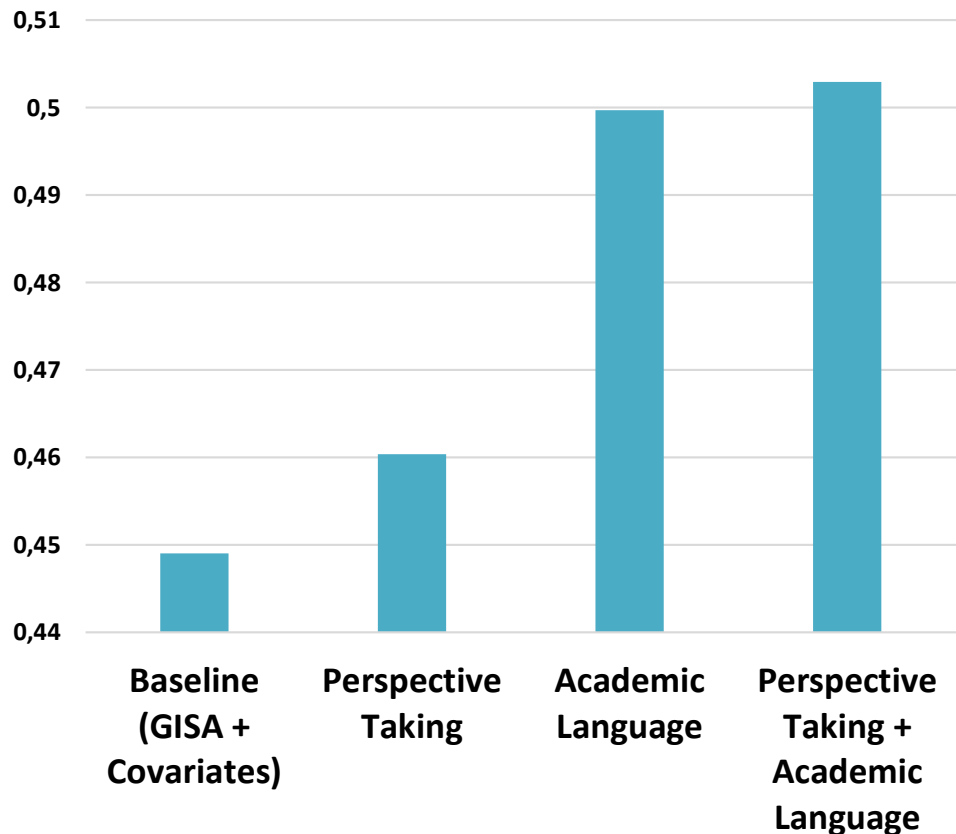


word

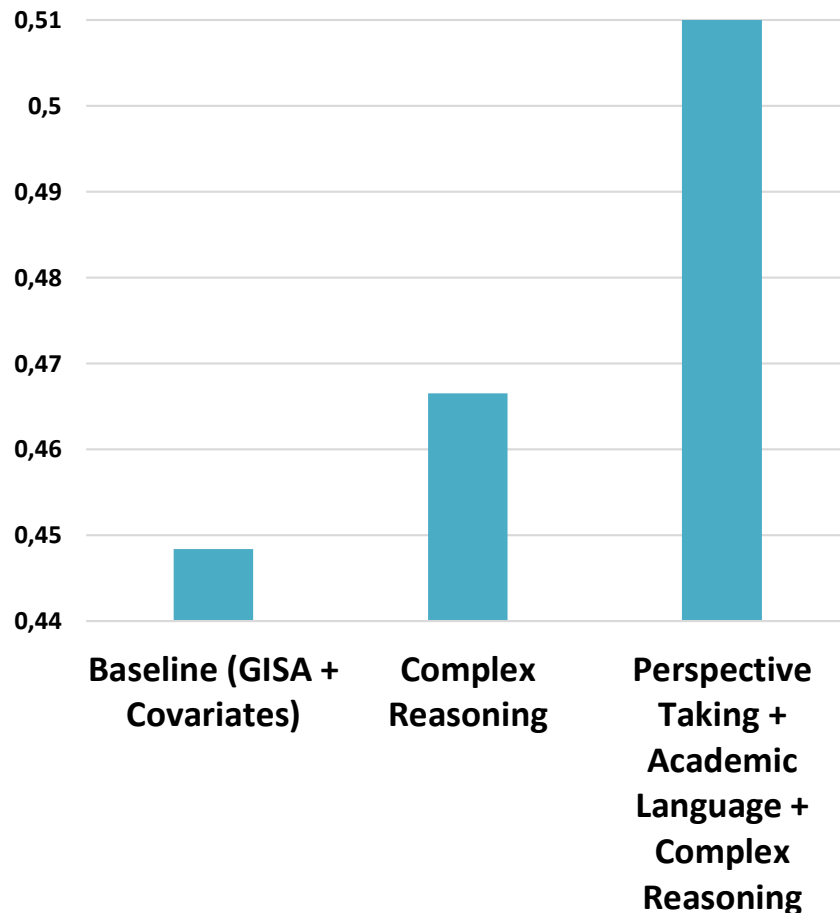
generation

# Diferença de compreensão profunda explicada pelas habilidades do aluno

**Explicação da Variância: Papel da Linguagem Acadêmica e Tomada em Perspectiva (n = 2933)**



**Explicação da variância: papel do raciocínio complexo (n = 1965)**



# Por que esses preditores?

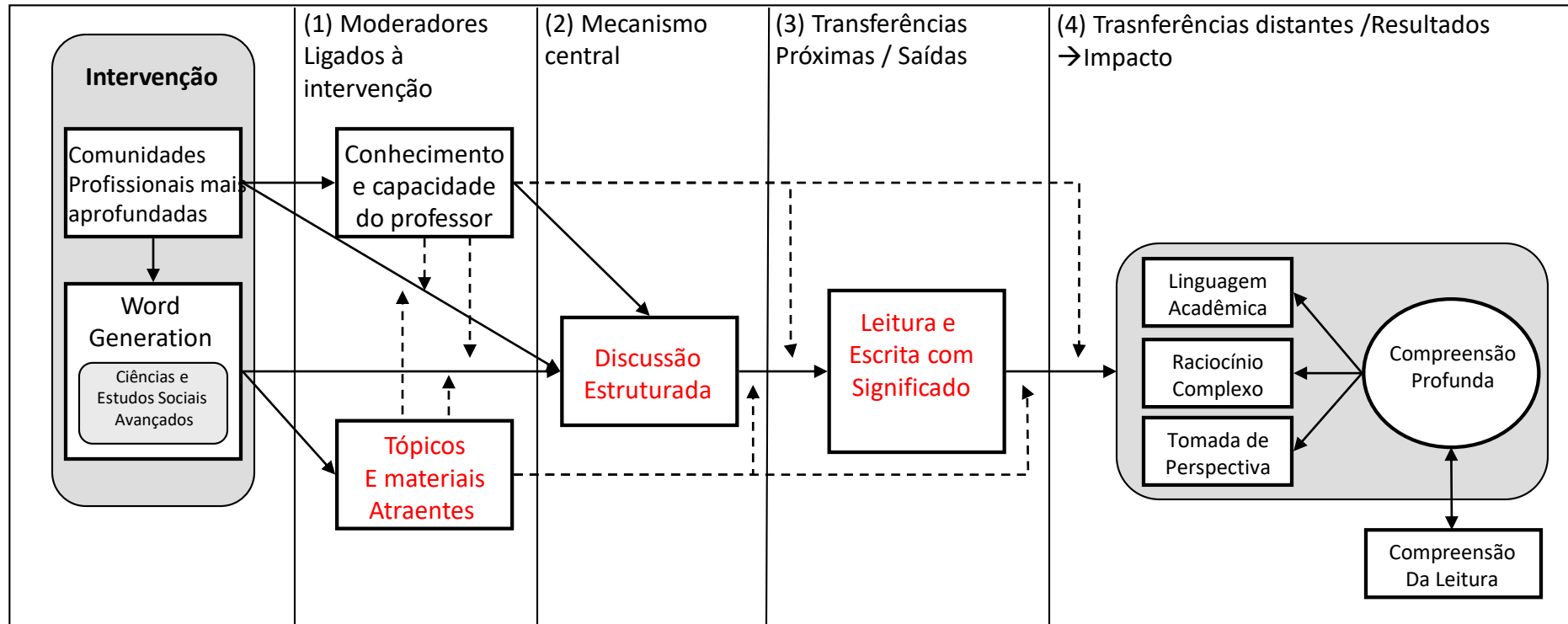
- Novos desafios no ensino médio e séries posteriores
  - Educação: tarefas e textos
  - Cumulativo: conhecimentos linguísticos e de contexto
  - Desenvolvimento: engajamento e propósito
- “Compreensão de leitura” ou “leitura para aprender” é a meta
- E isso depende de **muito mais** do que apenas da decodificação e do vocabulário

# Novos desafios textuais

- As palavras são mais longas e mais complexas
- Os textos são mais densos e menos acessíveis
- Narrativas dão lugar ao texto informativo
- A quantidade de conhecimento de contexto que é pressuposta se expande
- Novas exigências específicas de disciplina surgem
- As tarefas de compreensão são mais desafiadoras
  - síntese e análise, não apenas resumir



# Word Generation: Teoria da Mudança



# Curriculum do Word Generation:

## Exemplo duas semanas 4º / 5º anos (CCDD)



**Dia 1**

Notícias / Teatro do Leitor

---



**Dia 2**

Perspectivas dos Personagens

---



**Dia 3**

Estudo de Palavras

---



**Dia 4**

Estudo de Palavras, cont.

---



**Dia 5**

Ciências

**Dia 6**

Entrevista

---



**Dia 7**

Matemática

---



**Dia 8**

Pré-debate

---



**Dia 9**

Debate

---



**Dia 10**

Escrita

# Teoria da Mudança

- Engajar alunos em assuntos controversos

Word Generation

UNIT 1.05

considerable | contribute | demonstrate | sufficient |

This week's issue:

## DOES RAP MUSIC HAVE A NEGATIVE IMPACT ON YOUTH?



Some people believe that rap music has a negative influence on children and teenagers. They claim that the lyrics are and especially insulting to women. They also claim that rap music has contributed to aggression among young people and behavior that disrespects women.

But is that a valid claim? Supporters of rap music demonstrate a different perspective. They think it's important for rappers to express their feelings. Some people argue that violent individuals were probably violent before rap. Thus we can't blame rap for the behavior of violent individuals. Others say that rap is a form of poetry. They point to the positive images for today's youth.

However, some parents are concerned about the influence of rap and other explicit music. Parents Music Resource Center labels explicit songs and albums. Some parents consider this a form of censorship in a free society.

Do you think that we should have rules to prevent violence, especially violent rap? What evidence do you have to support your position? Does rap have a negative impact on youth?

Word Generation | Series 1.05

SERP

secure • perceive • data • network • monitor • technology

word generation

UNIT 5.06

### DO WE NEED TO GIVE UP OUR PRIVACY TO PROTECT OUR COMMUNITIES?

SCHEDULE

Day 1	Action News Reader's Theater
Day 2	Characters' Perspectives
Day 3	Word Study Fun Word Facts
Day 4	Journals and Journeys Informational Text
Day 5	Article Word Work
Day 6	Article
Day 7	Mash
Day 8	Prepare to Debate
Day 9	Prepare to Debate Debate
Day 10	Writing

SERP © 2015

Unit 5.06

131

➤ As unidades do Word Generation ligam tópicos controversos à vida dos alunos

SERP secure • perceive • data • network • monitor • technology  
 UNIT 5.06  
**word generation**  
**DO WE NEED TO GIVE UP OUR PRIVACY TO PROTECT OUR COMMUNITIES?**  
**SCHEDULE**  
 Day 1  
 Action News  
 Reader's Theater  
 Day 2  
 Characters' Perspectives  
 Day 3

SERP secure • perceive • data • network • monitor • technology  
 UNIT 5.06  
**word generation**  
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**SCHEDULE**  
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 Reader's Theater  
 Day 2  
 Characters' Perspectives  
 Day 3  
 Word Study  
 Four More Facts  
 Day 4  
 Details and Journeys  
 Informational Text  
 Day 5  
 Article  
 Word Work  
 Day 6  
 Article  
 Day 7  
 Plot  
 Day 8  
 Prepare to Debate  
 Day 9  
 Prepare to Debate  
 Debate  
 Day 10  
 Writing  
 Unit 5.06

SERP ability • monumental • zodiac • architecture • introduction • hierarchy  
 Social Studies  
**word generation**  
**THE EGYPTIAN PHAROHS: WISE INVESTORS OR WASTEFUL SPENDERS?**  
**SOCIAL STUDIES ACTIVITIES**  
 Session 1 2-5  
 Session 2 6-9  
 Session 3 10-11  
 Session 4 12-14  
 Session 5 15-16  
**SUPPLEMENTARY ACTIVITIES FOR OTHER CONTENT AREAS**  
 ELA 17  
 Math 18  
 Science 19  
**FOCUS WORDS**  
 20  
 © 2015 SERP

# ➤ As atividades do Word Generation apresentam materiais de modo significativo e atraente e ajuda os alunos a entenderem como isso é valor para eles

Day 1 **secure** • **perceive** • **data** • **network** • **monitor** • **technology**

Reader's Theater **Do we need to give up our privacy?**

Discussing Freedom and Security

On Monday, when the students in Ms. Jackson's class entered the room, they noticed that she had written something on the board: "Those who would give up essential Liberty, to purchase a little temporary Safety, deserve neither Liberty nor Safety." Some students raised each other what the sentence meant. Ms. Jackson's students were having trouble figuring out the line, did they realize it must be important.

Line 1

Shania: Ms. Jackson, what you wrote sounds like a serious warning. Did we do something wrong?

Ms. Jackson: No, Shania. Benjamin Franklin wrote those words 250 years ago. He was talking about something very different, but today some people quote him in debates about whether we should give up our privacy so we can be safer. I was thinking of it because I just came from a meeting with the principal and the other teachers. The principal **perceives** a need to install video cameras to **monitor** the bathrooms, hallways, and the playground to keep our school community safer. I'm trying to decide what I think about this idea, and I wanted to find out how you all feel about it.

Darnell: Well, I think having cameras around is a great idea. You know, we've had a problem with bullies here in school. We're okay in our classrooms but not in places where the teacher's not watching. Video cameras could make us feel more **secure** everywhere in the school.

Shania: I don't think it's worth it, Darnell. When I'm with my friends in the hall or outside the school, or combing my hair in the bathroom, I don't want someone watching me. I can't stand the idea that I'd have no privacy anywhere in this school.

Darnell: But school is really a public place. That's why they call it public school! It's not like being in your room at home.

Paula: If I were doing anything wrong, or even thinking about doing something wrong, I wouldn't want any video cameras in school. But as long as I'm not doing anything wrong, the cameras wouldn't bother me.

Shania: But even if I don't do anything legal or wrong, if I had something about a teacher or did something embarrassing—could they get that in the video? That sounds like an invasion of my privacy.

Alle: But Shania, you're always taking pictures of people and sending them around. Maybe you shouldn't be doing that if you care so much about privacy. I agree with you, though. What if somebody backs up the video **network** and lets our parents—or even complete strangers—watch us in school? **Technology** is great until it gets into the wrong hands,

Reader's Theater continues on the next page.

## Reader's Theater

**Ms. Jackson:** No, Shania. Benjamin Franklin wrote those words 250 years ago. He was talking about something very different, but today some people quote him in debates about whether we should give up our privacy so we can be safer. I was thinking of it because I just came from a meeting with the principal and the other teachers. The principal **perceives** a need to install video cameras to **monitor** the bathrooms, hallways, and the playground to keep our school community safer. I'm trying to decide what I think about this idea, and I wanted to find out how you all feel about it.



**Darnell:** Well, I think having cameras around is a great idea. You know, we've had a problem with bullies here in school. We're okay in our classrooms but not in places where the teacher's not watching. Video cameras could make us feel more **secure** everywhere in the school.

**Shania:** I don't think it's worth it, Darnell. When I'm with my friends in the hall, or outside the school, or combing my hair in the bathroom, I don't want someone watching me. I can't stand the idea that I'd have no privacy anywhere in this school.

**Darnell:** But school is really a public place. That's why they call it public school! It's not like being in your room at home.

**Paula:** If I were doing anything wrong, or even thinking about doing something wrong, I wouldn't want any video cameras in school. But as long as I'm not doing anything wrong, the cameras wouldn't bother me.

Session 1 **justify** • **monumental** • **surplus** • **architecture** • **infrastructure** • **hierarchy**

Reader's Theater

Spending Priorities

Setting: The school had just ring of Honor More Middle School, and two seventh-grade boys are waiting outside for their friends who took a detour to the restroom. The Darnell Kivly arrive.

Lee: The restrooms in this school are disgusting. The sinks are always clogged, there's germs everywhere, and some of the kids don't even flush. The floor on the sink is so gross. You have to be a germaphobe to go to the bathroom each time you go. Darnell, did you hear about the school's going to build a new swimming pool because this school lacks extra money? They've got a problem with priorities. They should use as students how to spend their money.

Cyrus: And that's the worst of it. It's not just any swimming pool—why are talking about building the "best" swimming pool money can buy. How can they justify such a huge expense? Frank, it's not just the bathrooms that are filthy and gross. We get gym class with broken desks. We don't have art or music classes. They spend the money on stuff we **need**, not on a swimming pool.

Alle: Dude, a good teacher is someone who can't help but give a lot to the students other than the book. WGA, and we'd be able to practice every day. In fact, at our school, they don't even have a big sports competition. I mean, we're not good. There's no water polo, and we can't change from our water polo. If our people came to see us, they'd be asking about the cost of the pool. They would justify the expense, wouldn't they?

Cyrus: Look, well, it's a little bit like the pool—the athletes. You guys already get all the special events. I mean, the school already has the principal and teachers right at the top, but the athletes aren't behind. The school supports athletes more than any other students. So, for those of us at the bottom, what good will a pool do? Why not use the money to fix the bathrooms? Or get some art and music teachers, or the athletic equipment so that other kids could get some support for things.

Heather: I have to admit the bathrooms are gross, but a pool is a great idea. Besides, it's not just for the athletes. Cyrus, the whole time we'll have access to the pool on our days and times. Swimming is super good for you, and I think that access is a great deal. Getting exercise would be easier. But most of all, the pool would put our school on the map. It'd be the best swimming pool ever. It'd be so cool!

Cyrus: Yeah, sure. Think about what the principals said. But there's a huge amount of money on building a good pool. One of our other ideas is to build a gym. But a big pool of good architecture did this. The principal's priority, surplus, surplus, surplus—what a waste.

In this week's social studies lesson, you will learn about the pyramids and temples of ancient Egypt. Thousands of years ago, ancient workers for pharaohs built great pyramids. These workers built with gold, silver, and iron. The building of the pyramids and the construction of the temples used the Egyptian calendar, for more than 7,000 years to build and date all the people.

As you learn about these monumental structures, think about these questions:

- ▶ How was Egypt's surplus wealth created?
- ▶ Why did Egypt use so much of the surplus to build the pyramids and other monuments?
- ▶ Was this use of the wealth justified? Where, if any, was it wasteful? With your partner!

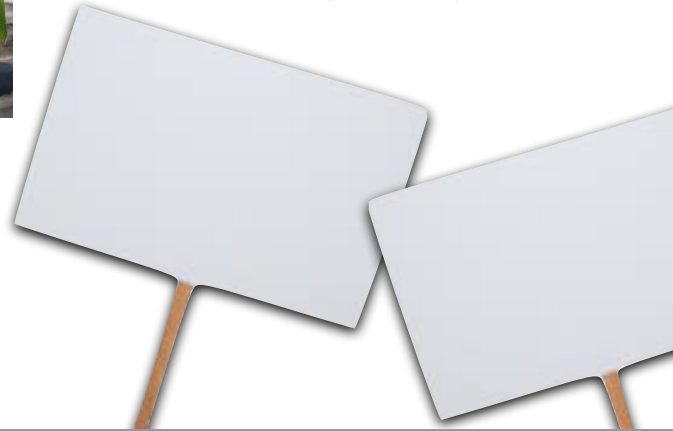
# Teoria da Mudança

- Promover a conversa dos alunos, especialmente a conversa entre pares (Applebee, Langer, Nystrand, & Gamoran, 2003)



## TURN AND TALK

In September 2012, teachers in Chicago went on strike because they were unhappy with their working conditions. Strikers held up signs like the one in the picture (see left). If the workers who went on strike in Deir el-Medina had signs, what do you think they would have written? Write your messages in the signs below.



➤ As unidades do Word Generation contêm diversos apontamentos que encorajam os alunos a compartilharem suas ideias e opiniões



**Discussion question:** How do you feel about being videotaped in school?



**Discussion question:** Is it worth giving up some of our privacy to enjoy the connection that we get from belonging to social networks?



**Discussion question:** Think about video cameras that exist in your community. Do you think they are helpful or harmful?

Day 1 secure • perceive • data • network • monitor • technology

**Reader's Theater, continued** Do we need to give up our privacy?

9 **Sharia:** Which is why I don't want other people taking videos of me. At least it's my choice what photographs I post on social media. I wouldn't have any control over the school video network.

10 **Affie:** You might feel like you're in control, but your phone collects data about you all the time. If someone stole your phone and then robbed a store, your phone's GPS would place you at the crime scene. That might seem crazy, but I watch the news and people misuse technology all the time.

11 **Ms. Jackson:** So, what do you all think Benjamin Franklin meant when he said, "Those who would give up essential Liberty, to purchase a little temporary Safety, deserve neither Liberty nor Safety?"

12 **Affie:** I think he meant we shouldn't give up our freedom just to be safe.

13 **Sharia:** And that freedom is worth more than safety.

14 **Paulie:** Maybe that to deserve freedom we have to be willing to take risks?

15 **Darnell:** Wait, privacy and liberty are not the same thing, right? Having a camera up doesn't mean I can't do the same things I would do if it weren't there.

16 **Sharia:** But I'll know a teacher could show my parents a video of me. I probably wouldn't act the same. So it would affect my freedom.

17 **Ms. Jackson:** There are great answers! I wish I had video recorded this discussion.

18 **Sharia:** Ms. Jackson! That would have been an invasion of my privacy.

19 **Ms. Jackson:** I would have requested your permission first, ma'am!

20 **Darnell:** I disagree, Sharia. I think it would be great to video record discussions about topics like these.

21 **Ms. Jackson:** We're out of time. I've got to get you all to lunch. Let's talk about this more tomorrow during social studies class, okay?

22 **Paulie:** Awesome! I'm loving talking about freedom and security.

23 **Affie:** You are very strange.

24 **Paulie:** Well, but I'm free to be strange!

Discussion question: How do you feel about being videotaped in school?

SEP 0 2015 Unit 5.06 118

Day 8 secure • perceive • data • network • monitor • technology

**Article** Do we need to give up our privacy?

Social Networks and Privacy

Today when we think of social networks, we think of Facebook, Instagram, or Twitter, but social networks have been around for almost as long as we have. As stated by author Francesco DeSis in his 2013 book, *Friend and Foe: How Social Networking in America*, "Social networks are groups of people connected by common interests and needs." Over many hundreds of years ago, people used social networks to share information about finding food and the best places to hunt and fish. Although they shared information mostly face-to-face, they also used writing and pictures to send messages. Communities can use social networks to stay connected, find resources, and keep their members secure.

In our world today, communication happens with the help of technology such as telephones and computers. Many young people first think of social media sites like Facebook, Instagram, and Twitter, though their grandparents are more likely to reach for a telephone or maybe even write a letter. People who use social networking sites are members of a growing social media community. Facebook alone has over 1 billion members.

One of those members is Emily, a sixth grader from Toronto, Canada. Emily spoke to Word Generation reporters about how Facebook helps her stay in touch with friends she makes at summer camp. "Being online helps me to connect with different people that don't live in Toronto, rather than saying 'I'll see you next summer' and forgetting about them." Emily also enjoys the control that she has on social media. "Being able to express myself, designing my page, and uploading any pictures are other reasons I stay on Facebook."

Matthew, Emily's twin brother, opened an account on Facebook but recently decided to close it. "I deleted my account because someone hacked into it," Matthew told Word Generation reporters. "What happened was that I wasn't checking my account very often and my friends told me that someone was writing me messages. My close friends knew I wasn't on." After Matthew closed his account the first time, his friends told him that they were still knocking the inappropriate messages. "I asked one of my friends who is a computer nerd to help me. We figured out that the hacker had my password. We changed my password to something really complicated and then we closed the account again. It's okay now." Matthew was upset because his privacy had been violated, and he never figured out who was responsible. "I had to send apologies to all my friends," Matthew recalled. "It was really embarrassing."

Many parents monitor how their children use the internet because they want to protect them from the risks of being people with bad intentions called stalkers on them and their friends. Not every kid understands the risks, they can feel pressured to get online to stay in touch with friends. These days, making the choice between staying connected and protecting our privacy is a difficult dilemma!

Discussion question: Is it worth giving up some of our privacy to enjoy the connection that we get from belonging to social networks?

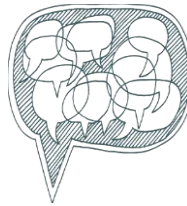
SEP 0 2015 Unit 5.06 145



➤ Em cada unidade do Word Generation, os alunos trabalham em grupos para preparar um debate

Prepare to Debate

Do we need to give up our privacy?



Is it worth giving up our privacy to make our communities more secure?

For tomorrow's debate, your teacher will assign you to one of these positions:

Yes

It is worth giving up our privacy to make our communities more **secure**.

No.

It is not worth giving up our privacy to make our communities more **secure**.

Today you will work in a team to prepare for the debate. Use the chart below to prepare to support your position and argue against **the other team's** position. Use evidence from the unit, other sources, and your personal experience.

Support for my side's position

Day 8 secure • perceive • data • network • monitor • technology

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Support for my side's position

What will be the other side's main argument?	How will we respond to this argument?

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Session 2 justify • monumental • surplus • architecture • infrastructure • hierarchies

Building Background Knowledge

Striking Workers: Deir el-Medina (Set Meas)

The picture below shows the recently excavated remains of the ancient village Set Meas (now called Deir el-Medina), home to the scribes and artisans working on the nearby tombs. We know a lot about how the inhabitants of Set Meas lived from papyrus documents and inscribed pottery shards found in the ruins - these include receipts, prescriptions, magic spells, and even love songs! About 70 workers and their families lived in the village, in 3-4 room mud brick houses. Though these houses are smaller than Egypt's temples, tombs, and other monumental forms of architecture, the people who lived there were not peasants. They were skilled artisans - potters, carpenters, coppersmiths, sculptors, painters, and architects.

These workers helped design the tombs, carved sculptures, and made furniture and other beautiful objects to place in the tombs. Many were able to read and write. They were somewhere in the middle of Egypt's social hierarchy, well below the pharaoh and the elite, priests, and scribes, but much better off than the peasants.

The workers of Set Meas, like everyone else, had fixed during leaner times. Sometime around 1800 BCE, grain reserves ran low. There were many building projects going on in Thebes and perhaps not enough grain rations for all the workers.

Also, sometimes crop of crops stole grain from the reserves to re-sell. In any case, grain shipments to the workers at Set Meas suddenly stopped. To protest this unjust decision, the workers went on strike and refused to work until they were paid.

This event may well be the first recorded strike in history.

<http://www.bbc.com/news/1/health>

Q&A TURN AND TALK

In September 2012, teachers in Chicago went on strike because they were unhappy with their working conditions. Strikers held up signs like the one in the picture (see left). If the workers who went on strike in Deir el-Medina had signs, what do you think they would have written? Write your messages in the signs below.

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- Os alunos estão ativamente engajados em diálogos instrucionais uns com os outros
- A preparação para os debates do WG constrói profundidade de conhecimento através de trocas cumulativas e contingentes

## Prepare to Debate

## Do we need to give up our privacy?



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Day 8 secure • perceive • data • network • monitor • technology

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This event may well be the first recorded strike in history.

<http://www.bbc.com/news/3-2015-01-15-egypt-ancient>

Q&A TURN AND TALK

In September 2012, teachers in Chicago went on strike because they were unhappy with their working conditions. Shown below is a sign like the one in the picture (see left). If the work-ers who went on strike in Deir el-Medina had signs, what do you think they would have written? Write your messages in the signs below.

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# Teoria da Mudança

- Desenvolvendo posturas pessoais em um texto

**SHOULD A STANDARDIZED TEST BE A REQUIREMENT FOR HIGH SCHOOL GRADUATION?**

UNIT 2.01

standardized | assess | criteria | correspond | formulate

**TAKE A STAND**

Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.

standardized | assess | criteria | correspond | formulate

Word Generation | Series 2A | Unit 2.01 | wordgeneration.org

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# Teoria da Mudança

- Defendendo posturas com evidências baseadas em texto

**Shania** thinks that:

- Companies are collecting **data** from our cell phones.
- Video cameras are alright as long as the school doesn't share the **data** with outsiders.
- It's not worth feeling more **secure** with video cameras if it means giving up privacy.

Evidence: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Teoria da Mudança

- Aprendizagem de práticas discursivas para discussão e debate

**SHOULD A STANDARDIZED TEST BE A REQUIREMENT FOR HIGH SCHOOL GRADUATION?**

UNIT 2.01

standardized | assess | criteria | correspond | formulate

**DEBATE THE ISSUE**  
Pick one of these positions (or create your own).

**A**  Students should be required to pass a **standardized** test to graduate from high school.

**OR**

**B**  Passing a **standardized** test should not be a high school graduation requirement.

**OR**

**CREATE YOUR OWN**

Jot down a few notes on how to support your position during a discussion or debate.

Be a strong participant by using phrases like these:

Can you show me evidence in the text that...? *↔*

believe that... *↔*

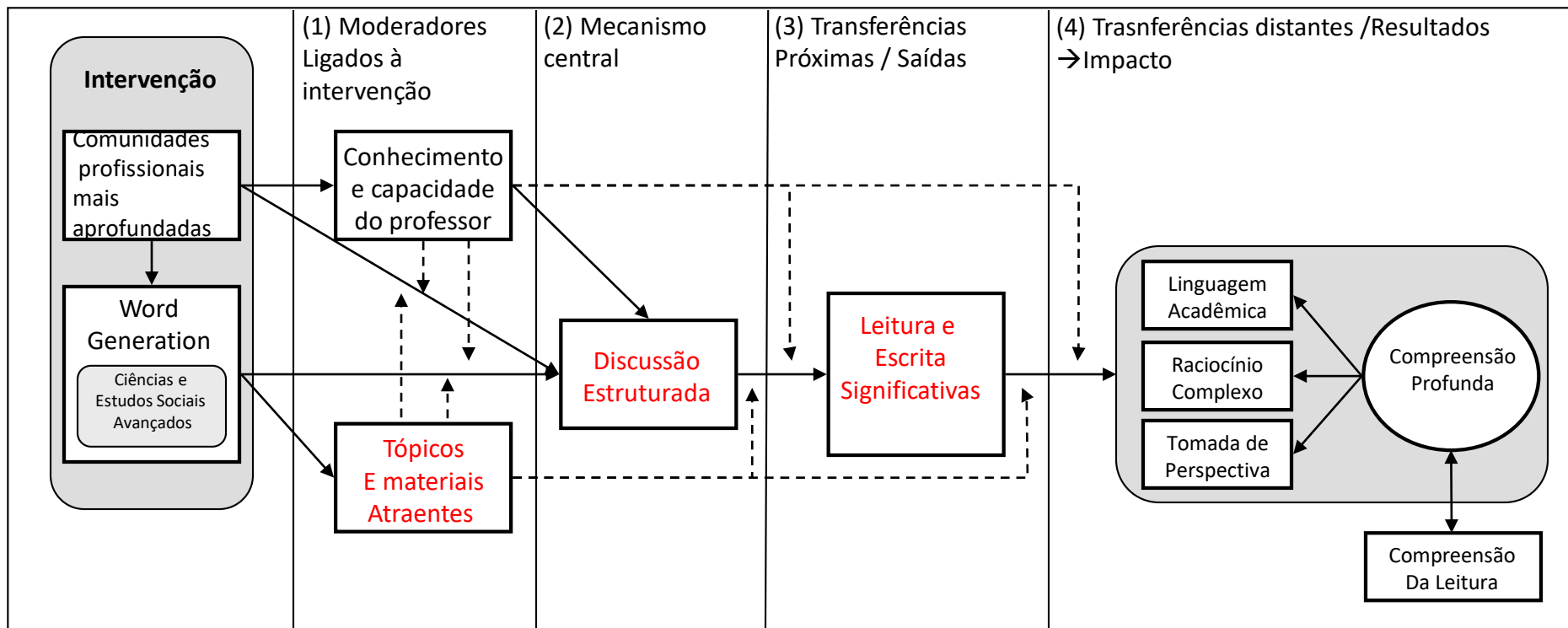
You make a good point, but have you considered...? *↔*

I agree with you, but... *↔*

Word Generation | Series 2A | Unit 2.01 | wordgeneration.org

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# Testando a Teoria da Mudança



## Measurement:

Conclusão Do livro

Capacidade do professor para: (A) modelar linguagem acadêmica (no contexto da prática dos alunos, conversa do aluno) (C) organizar interações

Observações em Sala

Medida SERP/CCDP (a) Formular argumentos (b) Participar de discussões no palco e uso de linguagem acadêmica rica

Observação de Discurso de Baixa Inferência

Checklist de vocabulário do Word Generation

GISA – Compreensão Profunda  
DiscoTest – Raciocínio complexo  
AL – Linguagem Acadêmica  
PTS – Tomada de Perspectiva

# Design do CCDD (Catalisando a Compreensão através da Discussão e Debate) e descrição da amostra

- **Cenário**

- 115 salas de aula em 24 escolas (12 pares randomizados)
- Quatro distritos escolares sócio-demograficamente diversificados

- **Amostra de Alunos**

- Ano 1: 5,583 alunos (4<sup>o</sup>-7<sup>os</sup> anos)
- Ano 2: 5,285 alunos (4<sup>o</sup>-7<sup>os</sup> anos)

- **Amostra das Salas de Aula**

- 18 escolas de educação primária ao 8o ano de dois distritos
- ~130 salas de aula, anos 4-7
- 4 coleta de dados: Outono e Primavera, por dois anos
- 3 condições
  - Professores WG implementando lições WG
  - Professores WG em práticas regulares (implementando lições não WG)
  - Grupo controle de professores

# Estatística da Amostragem Analítica Pós-Teste (Primavera), **Ano 1**: Meios, Meios Covariados Ajustados, Desvios Padrão Não Ajustados, Tamanho dos Efeitos Covariados Ajustados

Variable	Year 1						
	Control group			Treatment group			Adj. ES
	M	Adj. M	SD	M	Adj. M	SD	
<b>4/5th graders</b>							
WG Vocabulary	60.53	34.13	19.4	63.78	37.78	19.89	0.19***
Perspective Art.	0.05	0.35	0.86	0.03	0.38	0.86	0.03
Perspective Pos.	0.03	0.54	0.83	0.06	0.62	0.80	0.10 <sup>+</sup>
Academic Lang.	0.35	0.60	1.02	0.13	0.59	0.94	-0.01
Deep Reading Comprehension	964.2	269.7	57.6	965.3	270.7	60.12	0.02
<b>6/7th graders</b>							
WG Vocabulary	55.09	37.22	17.4	57.95	41.21	18.85	0.23***
Perspective Art.	0.10	0.33	0.83	0.09	0.39	0.81	0.07
Perspective Pos.	0.36	0.64	0.75	0.37	0.65	0.79	0.01
Academic Lang.	0.98	0.65	1.12	0.95	0.70	1.24	0.04
Deep Reading Comprehension	984.6	323.9	77.7	985.6	325.5	80.71	0.02

# Estatística da Amostragem Analítica Pós-Teste (Primavera), **Ano 2:** Meios, Meios Covariados Ajustados, Desvios Padrão Não Ajustados, Tamanho dos Efeitos Covariados Ajustados

Variable	Year 2						
	Control group			Treatment group			Adj. ES
	M	Adj. M	SD	M	Adj. M	SD	
<b>4/5th graders</b>							
WG Vocabulary	55.90	30.59	19.85	62.46	35.47	19.89	0.25 <sup>***</sup>
Perspective Art.	0.08	0.03	0.89	0.17	0.12	0.90	0.09 <sup>+</sup>
Perspective Pos.	0.03	0.31	0.75	0.11	0.42	0.77	0.12 <sup>*</sup>
Academic Lang.	0.26	0.57	1.06	0.38	0.63	1.09	0.06 <sup>*</sup>
Deep Reading Comprehension	952.89	239.91	58.70	966.59	248.02	64.34	0.14 <sup>***</sup>
<b>6/7th graders</b>							
WG Vocabulary	55.85	11.93	18.01	58.95	14.23	18.52	0.13 <sup>**</sup>
Perspective Art.	0.24	-0.03	0.88	0.28	-0.01	0.82	0.02
Perspective Pos.	0.28	0.42	0.80	0.39	0.54	0.77	0.15 <sup>*</sup>
Academic Lang.	1.07	0.41	1.13	1.11	0.44	1.14	0.03
Deep Reading Comprehension	999.37	125.77	84.12	1007.09	130.85	80.27	0.06



# Taxa de conclusão do caderno de trabalho do WG por coorte para o Ano 1 e Ano 2: Total e por tertil

Variável	Ensino Fundamental		Ensino Médio	
	M	SD	M	SD
<b>Ano 1</b>	n=60		n=57	
Taxa geral de conclusão do caderno de trabalho do WG	47%	23%	51%	23%
1o tertil	72%	12%	74%	5%
2o tertil	48%	6%	57%	9%
3o tertil	22%	12%	23%	12%
<b>Ano 2</b>	n=54		n=50	
Taxa geral de conclusão do caderno de trabalho do WG	57%	24%	46%	24%
1o tertil	82%	10%	73%	11%
2o tertil	58%	4%	47%	9%
3o tertil	31%	17%	20%	8%

# Ano 1 Variação de impacto do WG por nível de implementação: **Anos 4 e 5**

	Vocabulário WG		Articulação de Perspectivas		Perspectiva de Posicionamento		Lingua-gem Acadêmica		Compreensão Profunda	
	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>
<b>Impacto principal Tertil do WB</b>	3.65**	0.19	0.03	0.03	0.08 <sup>+</sup>	0.10	-0.01	-0.01	0.9	0.02
Primeiro Tertil	5.35**	0.28	0.16*	0.19	0.16*	0.19	0.00	0.00	-0.74	-0.01
Segundo Tertil	3.52**	0.18	-0.03	-0.03	-0.0	0.00	-0.04	-0.04	2.81	0.05
Terceiro Tertil	1.55	0.08	-0.05	-0.06	0.09	0.11	0.00	0.00	1.02	0.02

# Ano 2 Variação de impacto do WG por nível de implementação: **Anos 4 e 5**

	Vocabulário WG		Articulação de Perspectivas		Perspectiva de Posicionamento		Lingua-gem Acadêmica		Compreensão Profunda	
	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>	<i>b</i>	<i>ES</i>
<b>Impacto principal</b>	4.88***	0.25	0.09 <sup>+</sup>	0.10	0.11*	0.15	0.06*	0.06	8.11***	0.14
<b>Tertil do Wb</b>										
Primeiro Tertil	9.81***	0.49	0.15	0.17	0.23**	0.31	-.15	-0.14	12.44**	0.21
Segundo Tertil	7.68***	0.39	0.10	0.11	0.13	0.17	-.09	-0.08	9.13 <sup>+</sup>	0.16
Terceiro Tertil	1.76	0.09	0.12	0.14	0.04	0.05	-.20	-0.19	7.59	0.13

Portanto, um foco nas  
habilidades do professor torna-  
se urgente!

Como eles devem ser preparados?

Como eles devem ser apoiados?

Quanto se pode esperar deles?

# Os professores importam

- Grandes diferenças nos efeitos entre professores mais e menos eficazes.
- "A descoberta mais sólida da pesquisa sobre a implementação de inovações educacionais nos últimos trinta anos é que as *variações de escola para escola* nos efeitos sobre a aprendizagem dos alunos são significativamente maiores do que as *variações entre programas*" (Elmore, 2004, p. 1).
- A variação nos efeitos entre os professores nas escolas é ainda maior do que aquela entre as escolas.

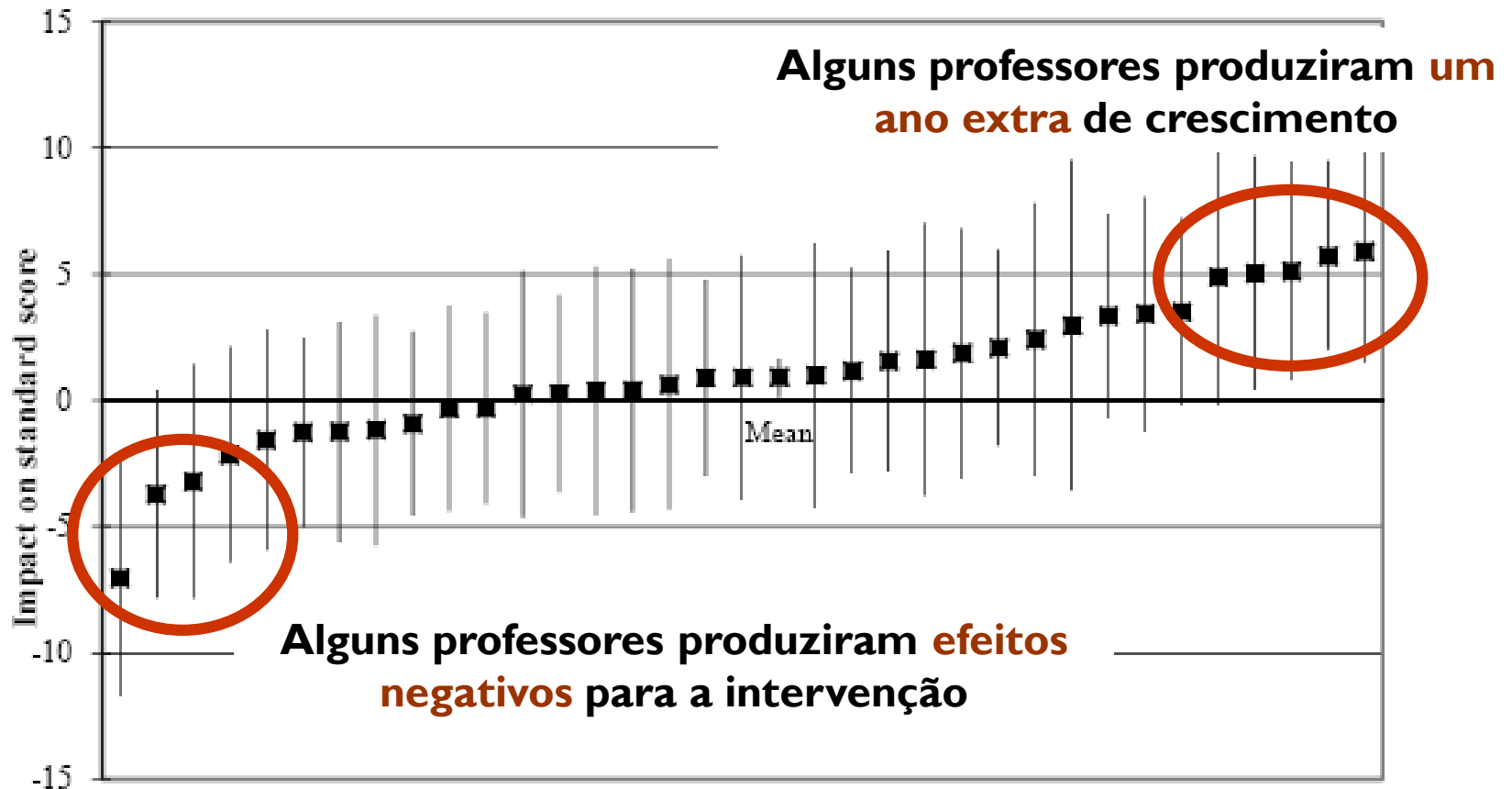
# Os professores importam: Estudo de Melhoria nas Oportunidades de Leitura

- Avaliação de aulas de intervenção de leitura no nono ano em 34 escolas secundárias.
- Comparação de dois programas (Reading Apprenticeship & Xtreme Reading) com eles mesmos e com nenhuma intervenção.
- No 1º ano, ambos os programas tiveram efeitos similares, pequenos (dois meses de crescimento extra).

(Kemple et al., 2008)

# Os professores importam: Estudo de Melhoria nas Oportunidades de Leitura

Fixed-Effect Impact Estimates on Reading Comprehension, by School



(Kemple et al., 2008)

# Mas, é difícil prever *quais* professores serão mais eficazes...

- Muitos estudos veem os professores como "caixas pretas", por isso não sabemos quais são as características que mais importam.
- Os indicadores tradicionais não predizem bem a eficácia (Kane, Rockoff, & Staiger, 2006):
  - Credenciais de professores, Mestrados
  - Seletividade universitária, GPA, major
  - Ensigne para a América



# O que os professores precisam saber?

**Conhecimento de Conteúdo**  
**Leitura como um historiador**  
**Vocabulário matemático**

**Conhecimento pedagógico geral**  
**Gerenciamento de sala de aula**  
**Como falar com os adolescentes**  
**Como verificar a compreensão**

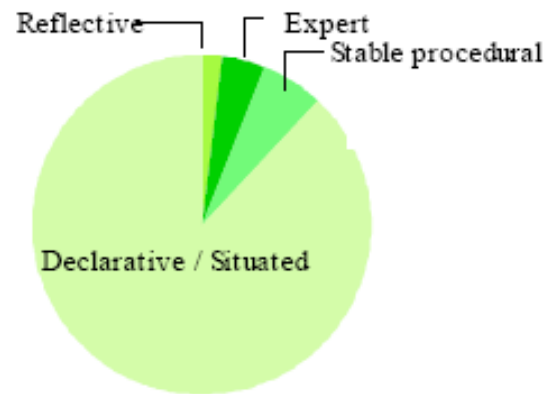
**Conhecimento de Conteúdo Pedagógico**  
**Como ensinar vocabulário matemático**  
**Como apoiar leitores em dificuldades**

# Conhecimento dos Professores

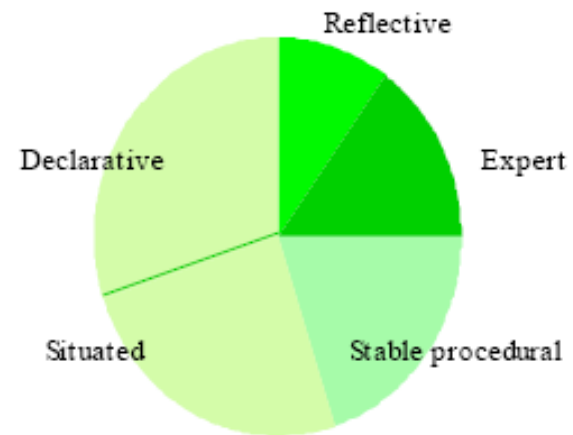


Snow, Griffin, & Burns (2005)

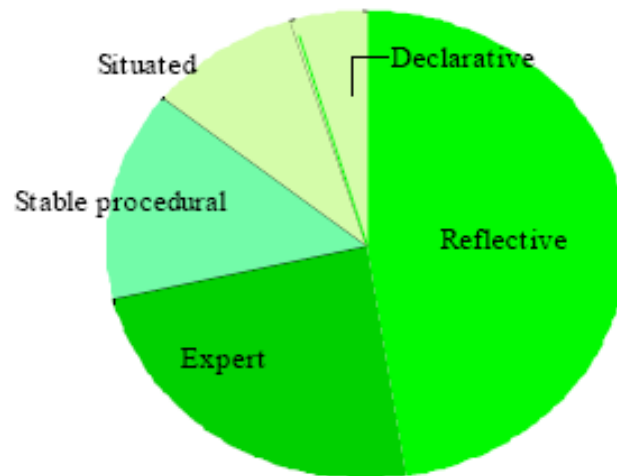
# Knowledge Representation at Three Points on a Teacher's Career



Preservice



Novice



Master Teacher



# Como os professores ensinam em escolas que superam as probabilidades (Langer, 2001)

## Seis Elementos

- Múltiplas abordagens para a instrução de habilidades
- Preparação de teste integrada
- Aprendizagens conectadas
- Ensino de estratégias de capacitação
- Concepções mais profundas da aprendizagem
- Trabalho colaborativo com finalidade de profundidade e complexidade dos entendimentos

**Alguns elementos encontrados em escolas típicas, mas todos foram encontrados *consistentemente* em escolas de alto desempenho.**

# Suporte Instructional

- **Liderança** que coloca a instrução e a construção da capacidade instrucional acima de outras tarefas
- **Cultura da Escola coerente** que impõe a interdependência e a responsabilidade mútuas, a responsabilidade interna e a capacidade de resposta às informações
- **Desenvolvimento profissional** que seja
  - *Profissional*: ênfase na aprendizagem e expectativas para melhorar a prática
  - *Desenvolvimento*: reconhece que os professores estão em estágios diferentes
  - Sustentado e cumulativo

# Treinamento como suporte instrucional

- Bastante investimento: \$31 milhões na Pennsylvania A, mais de \$30 milhões na Flórida, etc.
- Variação na sua definição:
  - Tradicionalmente, um especialista em leitura que avalia e ensina leitores com dificuldades individualmente
  - Cada vez mais, um provedor de desenvolvimento profissional na escola com o intuito de melhorar a instrução e liderar iniciativas na toda a escola
- Variação no que realmente parece
- Evidência limitada sobre se / como funciona

(See Snow, Ipolito, & Schwartz, 2006)

# Currículo como suporte instrucional

- Word Generation é apenas um exemplo
- Discutir pode ser difícil
- Mas alguns tópicos e algumas atividades sustentam sua qualidade
- Mesmo uma pequena discussão pode ser uma grande mudança
- Forte evidência de que, se implementada, funciona

# Referências

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# Aprenda Mais

- <http://www.serp institute.org/>
- <http://wg.serpmedia.org/>
- <http://aala.serpmedia.org/>
- <http://ccdd.serpmedia.org/>
- <http://rise.serpmedia.org/>

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