

독서후 토론, 질문하는 법

Questioning Strategies to Activate Thinking

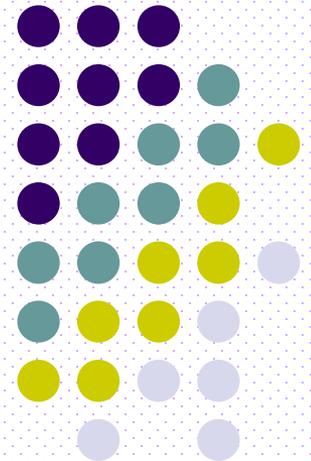
높은 사고력을 촉진하는 질문법

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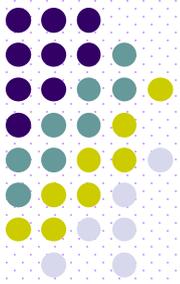
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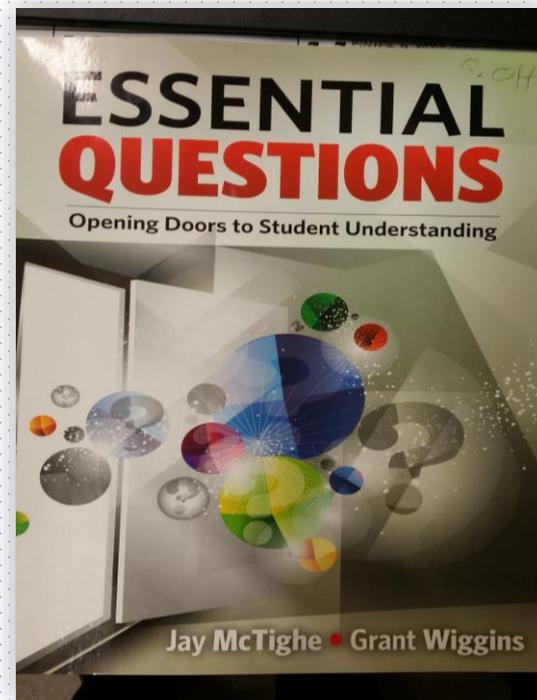
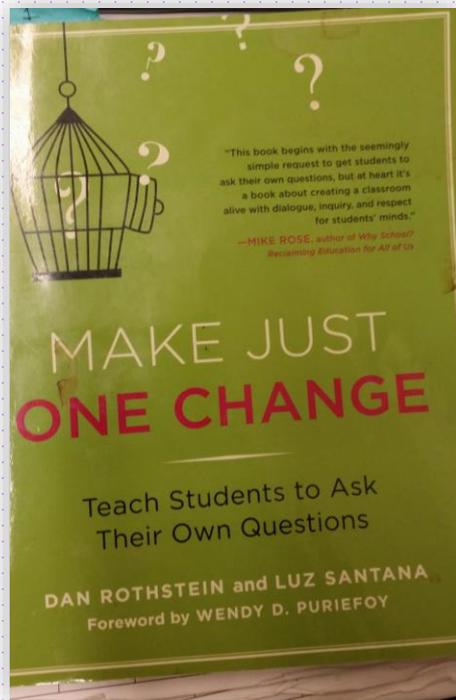


Quotes (발췌)



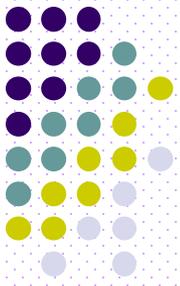
“We often search for better answers when we should be searching for better questions.”

정답을 찾으려 하지 말고 좋은 질문을 하라.



How to Ask Questions

질문하는 방법



1. Try to pause after asking a question (wait time)

질문을 한 후, 잠시 기다려준다.

“Developing Minds”(심성을 개발하기) by Arthur Costa

2. Try to avoid frequent questions which require only a yes or no answer. Try to ask questions that are open-ended/higher level: interpret, analyze, predict in unknown circumstances

“네/아니오”로만 대답하게 하는 빈번한 질문은 피한다.

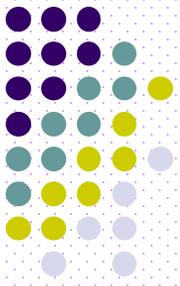
“개방형 혹은 높은 수준”의 질문을 시도한다: 해석하기, 분석하기, 알지 못하는 상황에서 예측하기

3. Try to avoid answering your own questions.

당신이 한 질문에 답을 해버리는 것을 피한다.

How to Ask Questions

질문하는 방법



4. Try to follow up student responses with the question, “Why?”

학생이 대답하면, “왜 그렇게 생각하는지” 추후 질문을 한다.

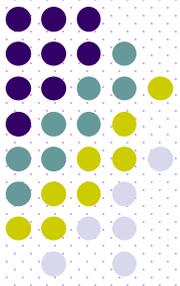
5. Try to avoid giveaway facial expressions to student responses.

학생의 대답에 얼굴 표정으로 평가를 드러내지 않도록 한다.

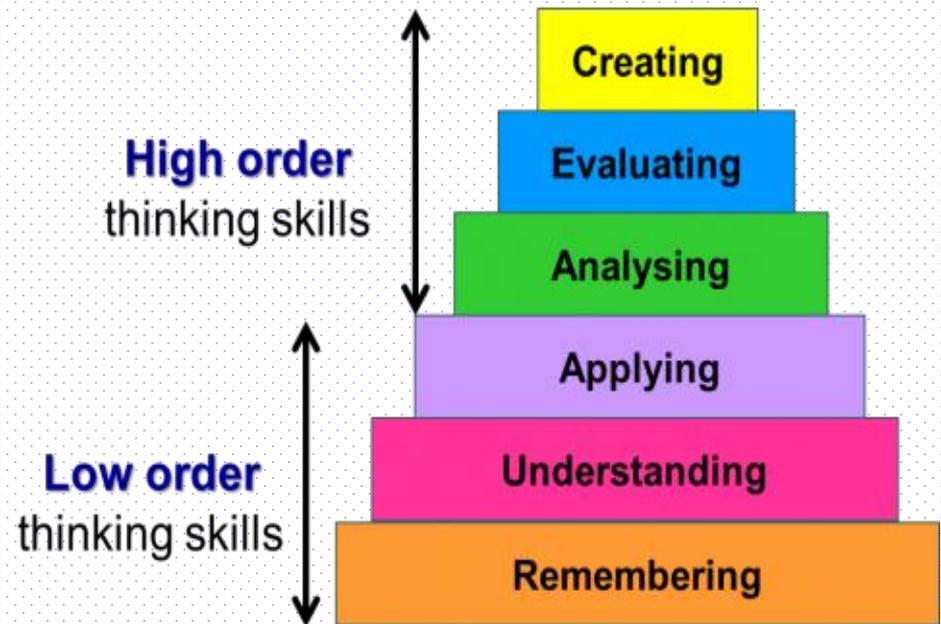
6. Try not to label the degree of difficulty of a question.

(학생이 하는) 질문의 난이도를 매기지 않는다.

Cognitive taxonomy Frameworks

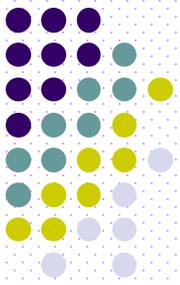


- Originally developed by Benjamin Bloom [1956]
(원저: Bloom's Taxonomy)
- (증보본) Updated by Lorin Anderson and David Krathwohl [2001]:
 - Remember 기억하다
 - Understand 이해하다
 - Apply 적용하다
 - Analyze 분석하다
 - Evaluate 평가하다
 - Create 만들어내다



Webb's Depth of Knowledge (D.O.K.) Framework

지식의 깊이, 그리고 질문



- 개발자 Develop by Dr. Norman Webb [1997]
- 4단계 Four Levels of D.O.K.:

Level 1: Recall 기억, 암기

Who was the main character? 주인공은 누구였나요?

Level 2: Skill or Concept 기술/개념 이해

Will you restate in your own words? 당신의 말로 다시 말해보세요.

Level 3: Strategic Thinking 전략적 사고

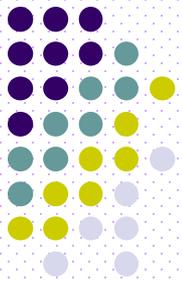
What questions would you ask in an interview with the author?

저자와 인터뷰하게 되면 어떤 질문을 하겠어요?

Level 4: Extended Thinking 확장된 사고

How would you reformulate your hypothesis based on results?

결과에 근거해서 당신의 가정(생각)을 어떻게 다시 만들어보겠어요?



Webb's Depth-of-Knowledge Model (Context Ceilings)

How else can the knowledge be used?

DOK-4

EXTENDED THINKING

What impact?

What influence?

What if?

What could happen?

What would happen?

What will?

What do you believe?

How do you feel?

What do you think?

What is your opinion / perspective / thoughts?

What can you design / develop / do?

What kind of argument / informational text / narrative could you write?

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Why can the knowledge be used?

DOK -3

STRATEGIC THINKING

Why is this the answer / conclusion / outcome / result / solution?

Why does / did it happen?

Why does / did it work?

Why can it be used?

What is the cause / effect?

What distinguishes / indicates?

What is the reason?

What is the relationship?

How could you?

Which one?

How can the knowledge be used?

DOK -2

BASIC APPLICATION OF SKILLS AND CONCEPTS

How can the answer / conclusion / outcome / result / solution be attained?

How does / did it happen?

How does / did it work?

How is / was it used?

How do you?

How would you?

What is the knowledge?

DOK -1

RECALL AND RERODUCTION

Who?

What?

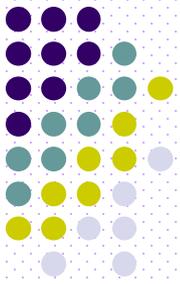
Where?

When?

How?

Why?

Developing Questions 질문 만들기



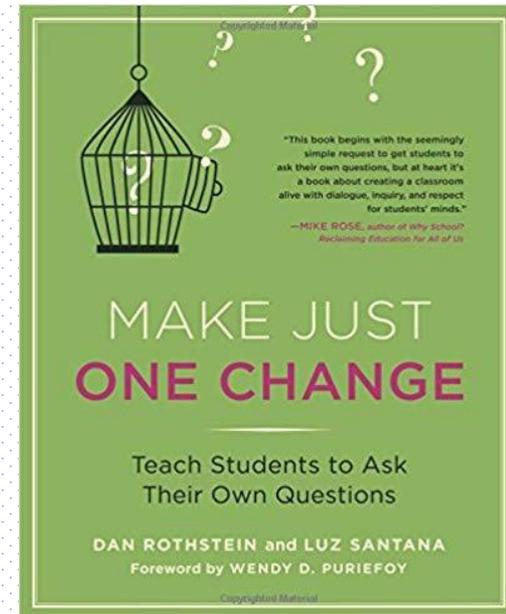
[참고문헌] Book resource:

Student-Generated Questions: 학생들이 만들어내는 질문들

Make Just One Change: Teach Students to Ask Their Own Questions

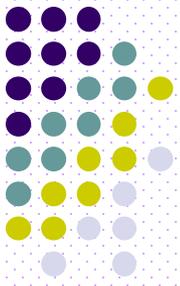
(한가지만 바꿔보기: 학생들이 질문을 만들도록 가르치자)

by Dan Rothstein and Luz Santana



Importance of Asking Questions

‘질문 하기’의 중요성



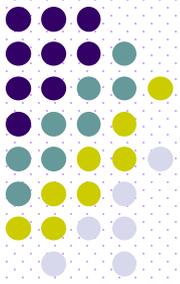
“The important thing is not to stop questioning. Curiosity has its own reason for existing. One cannot help but be in awe when he contemplates the mysteries of eternity, of life, of the marvelous structure of reality. It is enough if one tries merely to comprehend a little of this mystery every day. Never lose a holy curiosity.”

---Albert Einstein

“중요한 것은 ‘질문하기’를 멈추어서는 안된다는 점입니다. 호기심에는 그 자체의 존재 이유가 있습니다. 어떤 사람에게든 영원성, 삶, 놀라운 현실 구조의 신비로움을 생각할 때 경외감을 느끼지 않을 수 없습니다. 이러한 신비로움을 매일 조금씩 이해하려고 노력한다는 것만으로도 충분합니다. 절대 호기심을 잃지 않도록 해야 합니다.”

--- 알버트 아인슈타인

Sample Questions: 높은 사고력 질문의 사례

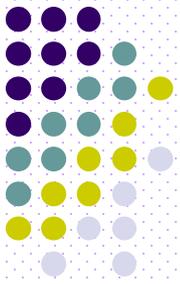


1. In your own words, what is the most important idea in this paragraph?
이 구절에서 가장 중요한 아이디어는 무엇인지, 여러분의 말로 표현하세요.
2. Can you tell in one sentence what the whole story is about?
이 전체 이야기가 어떤 내용인지, 한 문장으로 말해보세요.
3. What do you think will happen next? (prediction) 이 다음에는 어떤 일이 벌어질까요? (예측)
4. How do you think this story will end? 이 이야기는 어떻게 끝이 날까요?
5. Write a letter to the author. 저자에게 편지를 써 보세요.
6. If you were the author, how would you have ended the last chapter differently?
만일 당신이 저자라면, 마지막 부분을 어떻게 다르게 끝을 내겠어요?



What Makes Good Readers?

좋은 독자를 만드는 것은 무엇일까요?



❖ Good Readers “think” as they read:

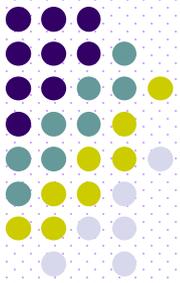
좋은 독자는 책을 읽으면서 “생각합니다.”

- Make connections **연관을 짓고**
- Visualize **그림 형태로 상상하고**
- Predict **예측하고**
- Interpret **해석하고**
- Summarize **요약하고**
- Ask questions **질문을 하면서**
- Reread **다시 읽습니다.**

Reflections

(반성)

(동료)



- ✓ Turn to your partner and share one thing you learned today.
오늘 배운 것을 동료와 공유하십시오.
- ✓ Please discuss how you will apply this new learning to your class/school/office/ home.

오늘 새로 배운 것을 당신의 교실/학교/직장/가정에 어떻게 적용시켜볼 수 있을지 얘기해보세요. (직접 적용하고 싶은 점, 한가지는?)

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