

---

---

---

---

---

---

---

---



---

---

---

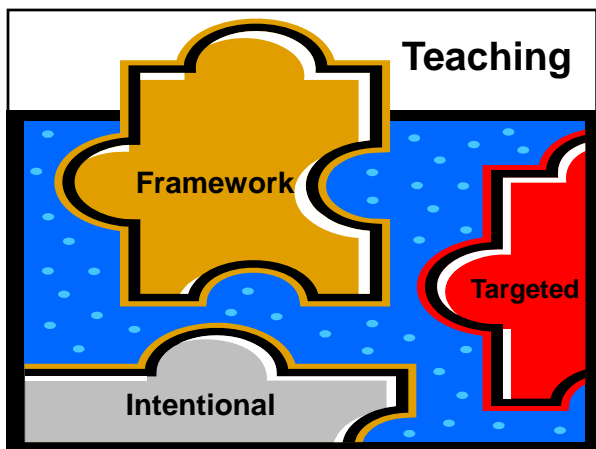
---

---

---

---

---



---

---

---

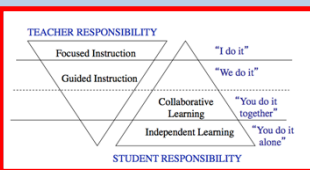
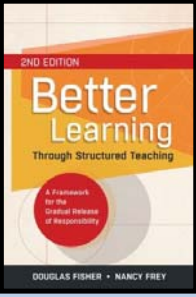
---

---

---

---

---



A framework for quality instruction.

---

---

---

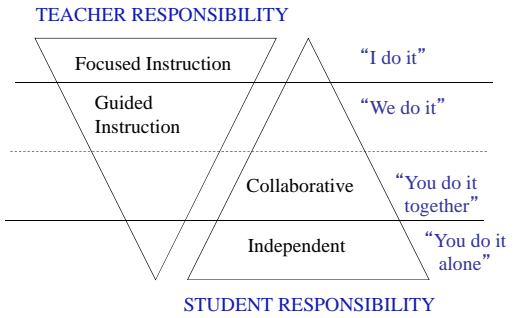
---

---

---

---

---



A Structure for Instruction that Works  
(c) Frey & Fisher, 2013

---

---

---

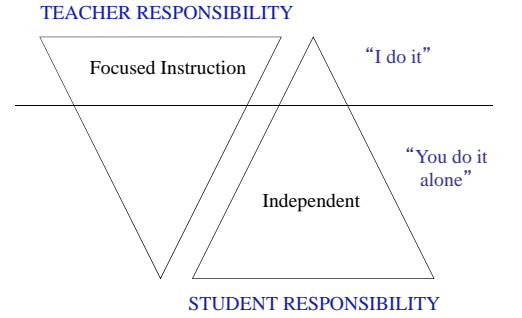
---

---

---

---

---



(c) Frey & Fisher, 2013

---

---

---

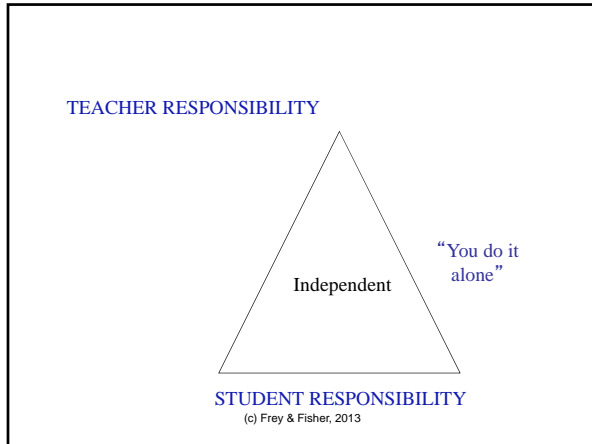
---

---

---

---

---



---

---

---

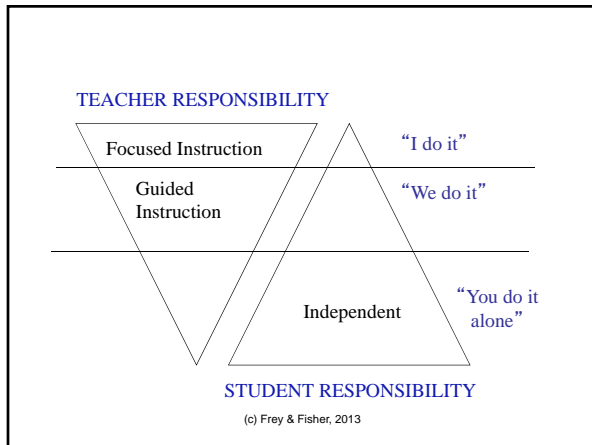
---

---

---

---

---



---

---

---

---

---

---

---

---

***intentional*** (adj.)  
an action performed with awareness; done deliberately, consciously, on purpose

**Be intentional**

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---



---

---

---

---

---

---

---



---

---

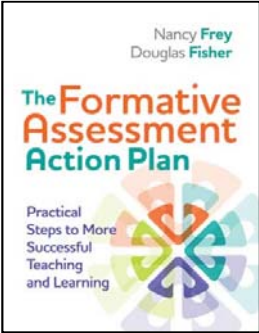
---

---

---

---

---



Nancy Frey  
Douglas Fisher

### The Formative Assessment Action Plan

Practical Steps to More Successful Teaching and Learning

Target through formative assessment practices.

---

---

---

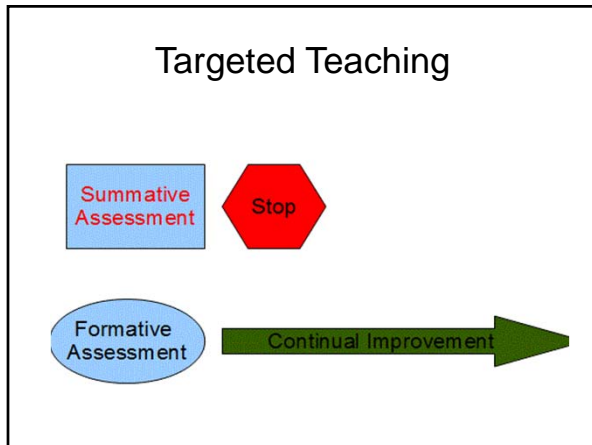
---

---

---

---

---



---

---

---


---

---

---

---

---



**Feed up:** establishing purpose

**Check for understanding:** daily monitoring

**Feed back:** providing information about success and needs

**Feed forward:** using performance for “next steps” instruction and feeding this into an instructional model

Fisher & Frey, 2009, Hattie & Timperley, 2007

---

---

---

---



---

---

---

---

**Check for Understanding:**  
How am I doing?



---

---

---

---

---

---

---

---



Using Oral Language to Check for Understanding



---

---

---

---


---

---

---

---

Using Questioning to Check for Understanding



---

---

---

---

---

---

---

---



---

---

---

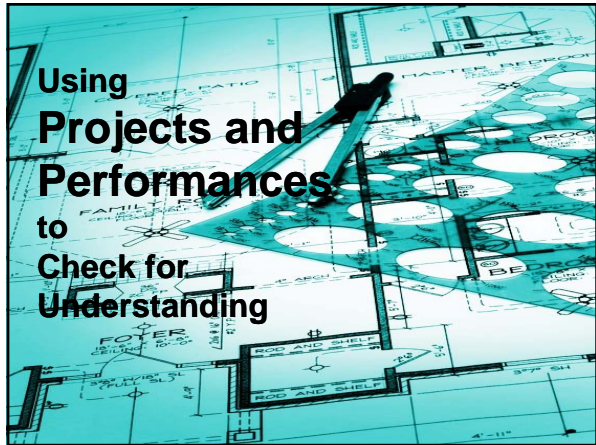
---

---

---

---

---



---

---

---

---

---

---

---

---



---

---

---

---

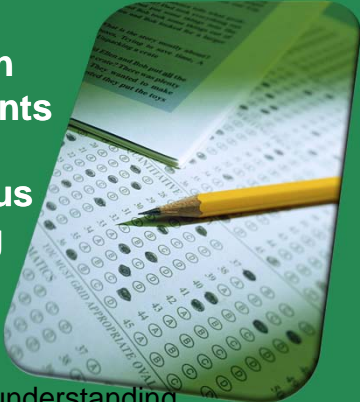
---

---

---

---

**Common Assessments and Consensus Scoring**



to check for understanding...

---

---

---

---

---


---

---

---

**Feedback**

Answering the student's question: "How am I doing?"



---

---

---

---


---

---

---

---

**Feedback should result in action.**



---

---

---

---

---

---

---

---



### Making feedback useful



- Timely
- Specific
- Understandable
- Actionable

---

---

---

---

---

---

---

---

### Feedback about the task

Most common type "You're pointing to the right one."

Corrective feedback "You'll want a transition between these two ideas in your paper."

Not useful without additional information

"Reread Section 3 of the text because you have this one wrong."

---

---

---

---

---

---

---

---

### Feedback about the processing of the task

Did you use the FOIL method to solve that problem?

It seems like a prediction might help here, right?

---

---

---

---

---

---

---

---

### Feedback about self-regulation

When you put your head down, you stopped listening to your group members.

I think you achieved what you set out to achieve, right?

---

---

---

---

---

---

---

---

### Feedback about the self as a person

You have great stamina because I can see you've been working on this for several minutes.

I bet you're proud of yourself because you used that strategy we've been talking about, and it's working for you.

---

---

---

---

---

---

---

---



**Feed forward**  
Where to next?

---

---

---

---


---

---

---

---

**Feeding forward involves...**



Misconception analysis  
Error analysis  
Error coding

---

---

---

---

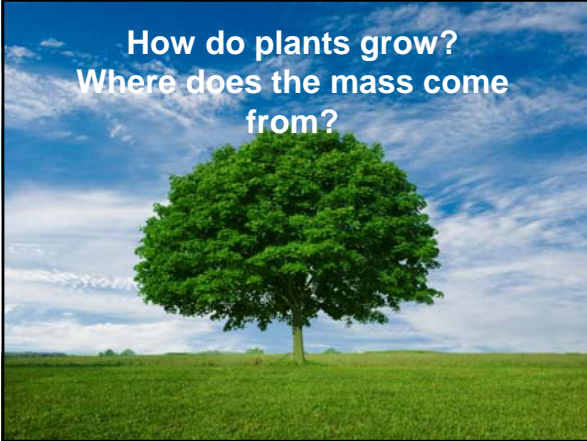
---

---

---

---

**How do plants grow?  
Where does the mass come from?**




---

---

---


---

---

---

---

---

<b>Item Analysis in Science</b>	
a) It gets its food from the soil. <i>Misconception</i>	Does not understand that nutrients are manufactured internally by the plant.
b) It turns water and air into sugar. <i>Oversimplification</i>	Understands that food is manufactured internally, but does not understand that water and the carbon dioxide (from the air) are used to make sugar and oxygen.
c) It has chlorophyll to produce food. <i>Oversimplification</i>	Does not understand that some parasitic plants do not contain chlorophyll.
<b>d) It adds biomass through photosynthesis.</b>	<i>Correct answer</i> 

---

---

---

---

---

---

---

---

Date: \_\_\_\_\_ Topic: WWII group project

Error	Period 1	Period 2	Period 3	Period 4	Period 5
Start of anti-communism sentiment in the US					
Timeline of events					
Countries involved and geography					
US involvement in war due to concentration camps					
German citizen unity around Hitler					
Allegiance membership (Allies and Axis Powers)					
Allegiance motivations					
Reasons for winning the war (human/material resources versus strategy)					

---

---

---

---

---

---

---

---

---

---

	Week 1	Week 2	Week 3	Week 4
Student has chosen the appropriate sign for the equation.				
Student has constructed the appropriate equation for the problem.				
Student has identified the key words that tell what the problem is asking his/her to do.				
Student shows confidence in his/her decision and is therefore able to justify the reasoning to the group.				
Student demonstrates the ability to check his/her work using the opposite sign (+ and - or x and /).				

---

---

---

---

---

---

---

---

---

---

Error	Period 1	Period 2	Period 3	Period 4	Period 5
Mid-sentence capitalization	JC			AA	
Colons and semicolons	JC, JT, AG, DL, TV	EC, MV, WK		AA, SK, MG, EM, BA, TS	HH, DP, MR, CH
Ending punctuation	JC, AG, SE	WK, MW		AA, BA	MR
Subject-verb	JC, JT, DL, MM, SL, ST, SD	RF, VE, VD, CC		AA, MG, SC, PM, LG	DP, DE
Tense consistency	DS	SI, JM		AA, TK, PC	DE
Spelling	JC, MM	WK, RT, AG, SJ		AA, MG, BA, GL, PT, DO, DE, LR	SR, DC, MF
Supporting evidence	JC, JT, MM	EC, SJ		AA, MG, BA, GL, PT, DO, DE, LR, SK, EM, TS, LG, PM, DP, RT, HA, KJ, DE, RC, DW, DL, KS	DE, MR, DC, AT

---

---

---

---

---

---

---

---

---

---

Introduction to Complex Numbers Error Analysis Sheet				
	Period 1	Period 2	Period 3	Period 4
Can explain what an imaginary number is, and can contrast it with real numbers	SS, LH		YV	HG, FR, SL, VG, CC, KY, SD, KI, NI, FE, HU, YS
Can reduce imaginary numbers to their simplest radical form	RA, EO, LH	OJ, IH, SR, MM	RC, NS, SA, JC, SZ	KL, DR, SD, CG, OG, QE, WN, RT, JK, FT, PD, NM, ER
Can cite at least two applications for imaginary numbers	OS, SM, VR, EO, LH	IH, SR, RD, MM	NS, JC, SZ	BB, QE
Understands the relationship between Cartesian, polar, and exponential forms (Euler's formula) of representation for imaginary numbers	JV, EO, KL, KD, NO, TO, MA, LH, VZ, UC, AZ	PL, GT, DM, SS, WB, CJ, LI, NH, RR, FF, DE, WR	NS, NH, CC, GT, JO, DD, SZ, WK, FL, BB, TR, FD, BH	HG, FD, LK, VL, NK, DZ, SW, KY, HU, QE

---

---

---

---

---

---

---

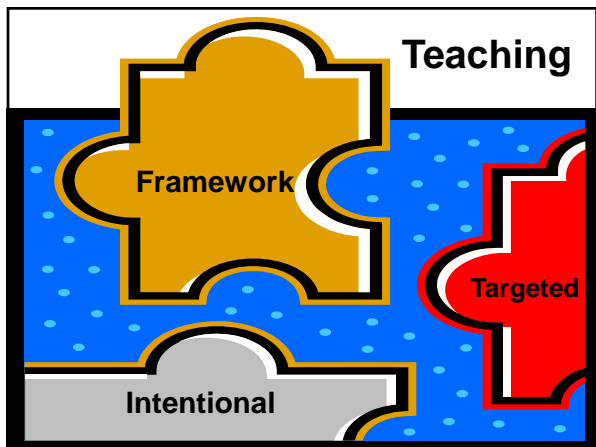
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

---

---