What’s My Status? What’s My Goal? What’s My Pathway to that Goal?

Steve Ferrara
Measured Progress
April 16, 2018

In A. Zenisky & C. DePascale (Organizers), We Can Do This: Communicating Information from Educational Assessments, invited session at the annual meeting of the National Council on Measurement in Education
Overview

- Design principles
- Growth targeting
- Pathways to Proficient

- Developing ideas, sketches, current thinking
Some guiding principles for score report design

- Principled, evidence based approach
- Score report design ➔ information design
Principles (cont.)

- Principled approach
  - Always start from intended SIUs
  - Select information elements to support those
- Evidence based
  - Limited efficacy research—except maybe in graphical design
  - Tryouts with targeted audiences
- We provide information, not just scores
  - Information elements
  - Story lines to guide intended interpretations

1 Thanks, Cathy Taylor
Guidance

- Literature on score reporting is primarily:
  - General principles and recommended procedures
    - *Handbook of Test Development (2nd ed., 2016)* Zenisky & Hambleton
  - Descriptions and evaluations of recent practices

- I’m not aware of *empirical* research on what works (e.g., results from user testing)
  - With apologies...
Growth targeting

- Simple design concept: $X, Y, X \rightarrow Y$

- $X = \text{Where am I now?}$
  - (And how much did I grow?)

- $Y = \text{Where do I want to be next?}$

- $X \rightarrow Y = \text{How do I get there?}$

1 Thank you, Andrew Ho
Growth targeting

- Most work has been on reporting status
  - For accountability purposes
  - Growth “accomplishment”
- NCME placing new emphasis on supporting learning
  - E.g., Conference theme, classroom assessment conferences
- I propose achievement growth targeting
  - Capitalize on growth modeling work
  - Apply that to supporting growth targeting
Growth targets

- “Growth” as a goal is vague
- Setting *specific, achievable* growth targets and identifying pathways to those targets:
  - Clarifies for teachers, families, students
  - Is consistent with motivation literature... intrinsically motivating
Illustration: Dashboard mock-up

Student / Group / School / District Name

- Teacher
- Principal
- District Leader
- Family
- Student
- Reading
- Mathematics
- Subdomains
- Other
- Total Test
- Spring
- Winter
- Fall

<table>
<thead>
<tr>
<th>History</th>
<th>Growth Goal Setting</th>
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<tbody>
<tr>
<td><strong>Grade</strong></td>
<td><strong>Scale Score</strong></td>
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</tr>
<tr>
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*Note: Probability indicators are placeholders for actual data.*
## Illustration

### Student / Group / School / District Name

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### History

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### Growth Goal Setting

#### Probability of Achieving Goal

- Advanced: 0.10
- Solid Proficient: 0.25
- Just Barely Proficient: 0.40
- Just Below Proficient: 0.60

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![Graph showing growth progress over grades](image)
## Illustration

### Growth Goal Setting

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**Probability of Achieving Goal**

- Advanced: ___
- Solid Proficient: ___
- Just Barely Proficient: .40
- Just Below Proficient: ___

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![Graph showing growth progress over grades](image-url)
Pathways\(^1\) to Proficient

- We’re NCME: psychometricians, test designers, test developers
- Some of us may not venture into curriculum, instruction, teacher training
- Let’s not be like dental monitors

\(^1\) Thank you, Dan Mix
“Why monitor a problem if you don’t fix it?”

LifeLock TV Commercial

“You have one of the worst cavities I have ever seen. Ok, have a good day.”

“Aren’t you going to fix this?”

“Oh, I’m not a dentist, I’m a dental monitor. I just tell you when you have a bad cavity.”

http://commercial-song.net/2016/06/lifelock-commercial-2016-dentist/
### Pathways illustration: ALDs approach

<table>
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<tr>
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<tr>
<td>– In low and moderately complex literary and informational texts</td>
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<td>– In the grade 4-5 text complexity band</td>
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# Pathways illustration: ALDs approach

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<th>Grade 5 Proficient</th>
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<td>By the end of year, 6th graders at the Proficient level can read and comprehend:</td>
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<tr>
<td>– Implicit themes, central ideas and details, and literary elements</td>
<td>– Two or more implicit themes or central ideas</td>
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Pathways: Skills approach

Pathways to Proficient: Three Examples

1. Cultivate Better Word Choice
2. Strengthen the Technical Aspects of Writing
3. Deepen the Complexity of Writing
4. Generate Stronger Connections across Text
5. Strengthen the Technical Aspects of Writing
6. Develop Sentence Structure and Formation
7. Deepen the Complexity of Writing
8. Generate Stronger Connections across Text
9. Cultivate Better Word Choice
10. Strengthen the Technical Aspects of Writing
Pathways: Skills approach

Paths to Proficiency - Grade 3

- Develop Sentence Structure and Formation
- Deepen the Complexity of Writing
- Generate Stronger Connections Across Text
- Cultivate Better Word Choice
- Strengthen the Technical Aspects of Writing

Legend:
- Proficient
- Moving Toward Proficiency

Measured progress

1 Maureen Johnson, Cynthia Miller, Measured Progress
Pathways: Skills approach

Deepen the Complexity of Writing

Tasks
- Chunk out parts of a draft (e.g., beginning, middle, end; reason 1, reason 2, reason 3)
- Have students use the Idea-Details strategy
- Use the sentence stretching strategy/ graphic organizer

Resources

Research
References


Thank you.

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