

A clear vision for understanding and mapping braille literacy learning

Emily White Melbourne Graduate School of Education





- Training in braille code recognition increases accuracy in oral (small effect size [ES]) and silent (large ES) reading rates and decreases errors (moderate ES) (Umsted, 1972)
- Training in Mangold programs increases overall tactile and braille recognition (Mangold, 1978): large ES
- Degraded braille cells reduce silent reading rate (Millar, 1987): very large ES
- The left hand reads braille faster (Hermelin & O'Conner, 1971): huge ES







What we don't know in research





What do we need to know?

Learning progression: "A trajectory of learning in a domain that spans a much longer period [than units in a curriculum] and provides a multi-year image of successively more sophisticated performance levels" (Heritage, 2008, p. 3).

- Developmental view of learning (Wiliam, 2007)
- Predicts how knowledge builds over time (Stevens et al., 2002).
- Learning: a transformative process of acquiring an increasingly sophisticated skill or understanding, rather than a unit of content that must be taught (White, 2019)







Best-practice reflective teaching and learning:

- Understand student ability
- Set goals that reflect high, realistic expectations
- Plan for targeted learning
- Track learning and growth over time
- Determine what is and isn't working
- Recognise and celebrate success
- Demonstrate our impact







Half decent

Impress a teenager

Rank beginner





WANTED: Expert teacher knowledge



Position Two

Positions of Hands Preferred by Best Readers

(From an illustration in the writer's reprint, "Summary of Information Collected by the Uniform Type Committee on the Mechanics of Reading Raised Type.")





What do we mean by 'braille'? What do we mean by 'literacy'?

What does it mean to be 'braille literate'? Print literate? Is there a difference?

"The flexible use of braille as a tactile medium for reading and writing" (D'Andrea, 2019)...?





Mapping the construct



(Woods & Griffin, 2003)





- Order of hypothesised difficulty
- Trial assessment
- Gather data on student ability
- Statistical analysis
- Retrial if needed
- Build learning progression







- Focus on skills and abilities of each student (not deficits)
- Draw on expert teacher knowledge
- Consistent language of student learning
- Enable reporting of progress on a continuum
- Give information to support instruction
- Track student progress





Best-practice reflective teaching and learning:

- Understand student ability
- Set goals that reflect high, realistic expectations
- Plan for targeted learning
- Track learning and growth over time
- Determine what is and isn't working
- Recognise and celebrate success
- Demonstrate our impact







Going forward with a vision of braille literacy

- Braille literacy what does it mean? What skills and knowledge does it encompass?
- What does it look like when a student improves in these skills? What do you look for when determining a student's current ability?
- If a student can do X to a certain degree, what is the next step in that learning? What would you teach them to do/know next, in order to refine and build that skill or knowledge?







Thank you



Emily White emily.white@unimelb.edu.au

Assessment Research Centre/ Learning Intervention Melbourne Graduate School of Education

