

Managing the design and delivery of instruction for students with learning difficulties

**Christina E. van Kraayenoord
The School of Education
The University of Queensland
Brisbane, Queensland
Australia**

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The main ideas and arguments

- **Challenges**
- **The issue**
- **Our response: Reconsider and change**
 - Instructional design and its elements*
 - **Curriculum**
 - **Instruction**
 - **Assessment**
 - **Environment**
- **Our response: Reconsider and change**
 - Delivery and delivery management*
- **Criteria for evaluation**
- **Conclusion**

The challenges for students with LD

- ❑ **Participants in very diverse classrooms**
- ❑ **Digital world**
- ❑ **Connected globe**
- ❑ **Symbolic world**

The challenges for teachers of students with LD

- **For identification: ability-achievement discrepancy models are being replaced by pre-identification strategy = response-to-intervention (RTI) models**
- **The development and implementation of research-based interventions**

The challenges for teachers of students with LD

The issue: A cognitive disconnect between the student and the curriculum

- **Gersten (2005) has stated that one of the reasons that children with with LD are not (cognitively) connecting with the regular education curriculum is that classroom instruction does not adapt supportively to individual differences**

Our Response

Reconsider and change:

Instructional Design

- - **Curriculum**
- - **Pedagogy**
- - **Assessment**
- - **Environment**

Reconsidering curriculum: What do we teach?

- ❑ **Learning outcomes - syllabus**
- ❑ **Complexity: Low level skills vs. High level skills**
- ❑ **Complexity: Surface vs. deep**
- ❑ **Pace**
- ❑ **Sequence**
- ❑ **Authentic text vs. controlled, created text**
- ❑ **Genre: Multiple text types in multiple media**
- ❑ **In school, out-of-school alignment**

Reconsider pedagogy: How do we teach?

- ❑ **Open, implicit teaching approaches vs. direct, explicit, structured approaches**
- ❑ **Student choice vs. Teacher given**
- ❑ **Technology vs. human**
- ❑ **The role of metacognition**
- ❑ **Nature of feedback to responses**

Reconsider pedagogy: Recommendations

- **Multiple representations of information (Orkwis, 1999)**
- **Explicit instruction within interactive dialogues (Swanson, 2001; Wong & Berninger, 2004)**
- **Differentiated instruction (Tomlinson, 2001)**
- **Strategy instruction (Swanson, 2001)**
- **Multiple means of expression (Orkwis, 1999)**
- **Motivational means of engagement (Orkwis, 1999) and teach for success but still within ZPD (Wong & Berninger, 2004)**
- **Teach for transfer**

Effective instructional practices for students with LD



Effective instructional practices for students with LD

- ❑ **Orient students to learning**
- ❑ **Daily reviews**
- ❑ **New material - modeling and demonstration (using examples), and then guided practice, and then independent practice**
- ❑ **Organizers (both graphic and semantic)**

Effective instructional practices for students with LD continued

- **Teacher questions and interactional dialogues**
- **Cooperative learning practices** (cooperative learning strategies, peer tutoring (Topping & Bryce, 2004), Reciprocal Teaching (Palincsar & Brown, 1984), Transactional Strategies Instruction (Pressley, et al., 1995), Collaborative Strategic Reading (CSR: Klingner & Vaughn, 1999))

Effective instructional practices for students with LD continued

- **Use of assistive technology - caution!!! See Disabilities, Opportunities, Internetworking and Technology (DO-IT)**
<http://www.washington.edu/doiit>
- **Control task difficulty**
- **Feedback**

Reconsider assessment: Recommendations

- **Aligned with the curriculum and related to outcomes**
- **Continuous and embedded feedback and assessment** (adapted from Hitchcock, Stahl, et al, 2003)
- **Variety of assessment tools**
- **Assessment information from multiple sources**
- **Used to provide information to inform instruction**
- **Promotes intrinsic motivation** (adapted from Hitchcock, Stahl, et al, 2003)

Reconsider environment: Recommendations

- **Create an inclusive environment**
 - **Attitudes/mindsets**
 - **Welcoming**
 - **Inclusive**
 - **Respect for diversity leading to expectation of tolerance**
 - **High achievement expectations**
- **Ensure accommodation/
modification is the norm not
the exception**
- **Promote interaction and
communication amongst all
participants**
- **Aim at meeting students' needs**

Reconsider: Delivery and delivery management

**Everyone must be accountable -
no excuses** (Denton, Foorman, & Mathes, 2003)

Intensive and feeling of urgency
(Denton, Foorman, & Mathes, 2003)

High expectations

**Matching interventions to
students' needs** (Denton, Foorman, & Mathes,
2003)

**Collaborative and
systemic/whole school**

- **planning**
- **implementation**
- **evaluation**

School-parent partnership (Taylor &
Pearson, 2004)

Criteria for making decisions re: goal setting, selecting materials, instructional practices and assessment practices

Based on Universal Design for Learning (UDL) principles

(adapted from Center for Applied Special Technology (CAST), <http://www.cast.org>, Hitchcock, Stahl, et al, 2003; Orkwis & McLane, 1998; Rose, 2001)

- **Issue: Equity - what is selected, used etc is useful to people with diverse abilities**
- **Basic premise = maximize flexibility**
- **We want goals, materials, instructional and assessment practices that both support and challenge students, while at the same time minimize the barriers**

Universal Design for Learning (UDL)

UDL = curriculum etc should include alternatives to make it accessible and applicable to students with diverse needs and abilities.

The ‘universal’ in universal design does not imply one optimal solution for everyone but rather it underscores the need for inherently flexible, customizable content, assignments and activities.

(adapted from “Summary of Universal Design Concepts” (2000), <http://www.cast.org>)

Criteria continued:

Based on Universal Design for Learning (UDL) principles


- = need to ensure there are multiple options**
 - ✓ of outcomes**
 - ✓ of presentation**
 - ✓ of expression**
 - ✓ of engagement**
- that are embedded**

Conclusion

- **Learning difficulties are real (Lloyd & Hallahan, 2005)**
- **There are challenges for individuals with LD and for their teachers**
- **They can be met by reconsidering and changing instructional design, delivery and delivery management**
- **Active management of these factors will lead to enhanced support for these students and the development of increasingly confident, engaged and independent learners.**

References

- Denton, C. A., Foorman, B. R., & Mathes, P. G. (2003). Perspective: Schools that "Beat the Odds": Implications for reading instruction. *Remedial & Special Education, 24*(5), 258-261.
- Gersten, R. (2005). Leveling the playing field: Commentary on "learning disabilities as operationally defined by schools." In R. Bradley, L. Danielson & D. P. Hallahan (Eds.), *Identification of learning disabilities: Research to practice* (pp. 351-359). Mahwah NJ: Lawrence Erlbaum.
- Hitchcock, C., & Stahl, S. (2003). Assistive technology, universal design, universal design for learning: Improved learning opportunities. *Journal of Special Education Technology, 18*(4), 45-52.
- Klingner, J. K., & Vaughn, S. (1999). Promoting reading comprehension, content learning, and English acquisition through collaborative strategic reading (CSR). *Reading Teacher, 52*, 738-747.
- Lloyd, J. W., & Hallahan, D. P. (2005). Going forward: How the field of learning disabilities has and will contribute to education. *Learning Disability Quarterly, 28*(2), 133-136.
- Orkwis, R. (1999). Curriculum Access and universal design for learning. ERIC/OSEP Digest No. E586. (pp. 4): ERIC/OSEP Special Project, ERIC Clearinghouse on Disabilities and Gifted Education, The Council for Exceptional Children. Retrieved July 7, 2005 from <http://www.ericec.org>.




Orkwis, R., & McLane, K. (1998). A curriculum every student can use: Design principles for student access. ERIC/OSEP Topical Brief. (pp. 21): ERIC/OSEP Special Project, The ERIC Clearinghouse on Disabilities and Gifted Education, The Council for Exceptional Children. Retrieved July 7, 2005 from <http://www.cec.sped.org/ericcec.htm>

Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition & Instruction, 1*(2), 117-175.

Pressley, M., Brown, R., El-Dinary, P. B., & Alferbach, P. (1995). The comprehension instruction that students need: Instruction fostering constructively responsive reading. *Learning Disabilities Research & Practice, 10*(4), 215-224.

Rose, D. (2001). Universal design for learning. *Journal of Special Education Technology, 16*(2), 66-67.

Swanson, H. L. (2001). Research on interventions for adolescents with learning disabilities: A meta-analysis of outcomes related to higher-order processing. *Elementary School Journal, 101*(3), 331-348.



Taylor, B. M., & Pearson, P. D. (2004). Research on learning to read -- at school, at home, and in the Community. *Elementary School Journal*, 105(2), 167-181.

Tomlinson-Clarke, S. (2001). Education and identity within a psychological and sociocultural context. In N. K. Shimahara & I. Z. Holowinsky (Eds.), *Ethnicity, race, and nationality in education: A global perspective. The Rutgers invitational symposium on education series* (pp. 193-210). Mahwah NJ: Lawrence Erlbaum Associates, Publishers.

Topping, K. J., & Bryce, A. (2004). Cross-age peer tutoring of reading and thinking: Influence on thinking skills. *Educational Psychology*, 24(5), 595-621.

Wong, B. Y. L., & Berninger, V. W. (2004). Cognitive processes of teachers in implementing composition research in elementary, middle, and high school classrooms. In C. A. Stone, E. R. Silliman, B. J. Ehren & K. Apel (Eds.), *Handbook of language and literacy* (pp. 600-615). New York: The Guildford Press.