

***The Potential of
Universal Design for
Learning***

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

A paper presented at the Joint Conference
LDA/RSTAQ/SPELD "Consult and Collaborate"
in Brisbane, Queensland, Australia
18-19 September, 2009

**Outline
of the presentation**

- The challenge of planning to teach all learners
- What is Universal Design for Learning (UDL)?
- Using UDL in planning the curricula, in teaching and in assessment in the classroom
- The evidence
- The potential of UDL
- Conclusion

C.E. van Kraayenoord 2

The challenge

- Increasingly support teachers are working with and alongside classroom teachers in co-planning and co-teaching
- Support teachers and classroom teachers both have expertise that they bring to planning
- Support teachers and classroom teachers must **plan** curricula, teaching and assessment that meets the needs of an increasing diversity of learners in their classrooms (and we don't know which student will walk through the door tomorrow?).

C.E. van Kraayenoord 3

The challenge - continued

- In the past we have expected students to adapt to the curricula with its many barriers to learning. **Instead "the burden of adaptation should fall on the curriculum ..."** (Meo, 2008, p. 21), **the teaching and the assessment**
- In addition, many classroom teachers assume that working with the support teacher means that what support teachers used to do/do (in their withdrawal programs and classes) now also has to be laid over the top of what they are planning for their students. **Rather there is a need to re-conceptualize the planning of curriculum, instruction and assessment and examine the ways in which curriculum, instruction and assessment can support academic achievement and be developed (be planned) to include all learners from the outset (Meo, 2008, emphasis added)**

C.E. van Kraayenoord 4

Meeting the challenge


- One framework for addressing diversity and creating flexible curriculum, instruction and assessment is Universal Design for Learning (UDL; Meyer & Rose, 2000; Rose & Meyer, 2002)

C.E. van Kraayenoord 5

The Concept of Universal Design (UD)

- The concept of Universal Design (UD) was first used in architecture = new buildings and spaces could be made accessible by their design from the beginning (Mace, 1997)
- Accessibility for individuals with disabilities (and others) should be a key principle in the design phase of architectural planning

C.E. van Kraayenoord 6




Therefore, according to Ron Mace, UD involved:

- "... the design of products and environments to be useable by all people to the greatest extent possible without the need for adaptation or specialized design." (Center for Universal Design, 2008)

C.E. van Kraayenoord 7

Your turn



- Look at the building/room we are in:
 - If you were designing this building/room from the beginning what would you do make it useable by all people to the greatest extent possible?
 - Now tell the person next to you about your ideas

C.E. van Kraayenoord 8

- The idea of UD was used in other areas

C.E. van Kraayenoord 9

UD has been applied to education and learning

- 1990s - Center for Applied Special Technology (CAST) = the leading centre for Universal Design in U.S.
www.cast.org
- Teachers must plan and develop curricula based on Universal Design
= design curricula that promotes access, participation and progress in general education for all learners (CAST, 2004)
= Universal Design for Learning (UDL)

C.E. van Kraayenoord 10

The main purposes for using Universal Design for Learning are:

- *Access*
- *Participation*
- *Progress*

C.E. van Kraayenoord 11

Access =

- (a) All students have access to the learning environment in which content is presented, and
- (b) All students have the opportunity to be engaged with the content

Participation =

- The teaching practices that are used allow the students to be actively involved and to contribute to the lessons

Progress =

- Teachers make sure that all students are making progress in their learning AND that they succeed and achieve in the classroom

C.E. van Kraayenoord 12

A definition of UDL

- *Universal Design for Learning means using curriculum content, teaching practices and assessment tasks that do not need to be adapted. They are flexible enough from the outset to accommodate learner differences (Meyer & Rose, 2005).*
- *That is, right from the start all students can access what they have to learn, participate in what is being taught, and make progress in learning.*

C.E. van Kraayenoord 13

3 essential qualities of UDL

- **Representation**
- **Engagement**
- **Expression**

C.E. van Kraayenoord 14

Representation

- The teacher uses many ways of delivering the content
- The teacher includes alternative ways of delivering the content
- The teacher uses many representations of essential concepts

C.E. van Kraayenoord 15

Representation continued

For example

- Provide lots of examples
- Use modelling
- Use posters and charts
- Use other staff (e.g., teacher aides)
- Use discussions
- Use videos, DVDs, tapes
- Use hands-on activities
- Etc

C.E. van Kraayenoord 16

Engagement

- The teacher uses various ways of attracting the students' attention, stimulating their curiosity, and meeting their motivational needs.
For example
 - Use their interests and hobbies
 - Use their preferences
- The teacher also creates opportunities that meets the students' different skill levels
For example
 - Use texts of different difficulty levels
 - Use group work or team work where each child can use their own skills

C.E. van Kraayenoord 17

- During the lesson the teacher also needs to make sure that the student stays engaged
For example
 - Encourage students to interact with each other about what they are learning
 - Talk to the students about their progress

C.E. van Kraayenoord 18

Expression

- The teacher allows the students to use various ways of responding
- This allows the students to demonstrate their mastery of learning in a way that is related to their strengths.

For example

- Complete a project where they can choose to present what they have learned orally, or in written form, or through using multimedia (e.g., video, blog, PowerPoint, podcast)
- Create a portfolio, or create a model, or write a journal, or draw a picture

C.E. van Kraayenoord 19

- In planning these concepts are then considered in relation to:
 - Curricula
 - Teaching and
 - Assessment

C.E. van Kraayenoord 20

Curricula

Important ideas about curricula

- Identify the "Big ideas" you want the students to know
- Identify the knowledge that the students can construct with others – "new learning" = a process of co-design of knowledge (Kalantzis & Cope, 2008)
- Make sure that what you want them to learn is meaningful, that is, it has a purpose
- Make sure that what you want students to learn is connected to real life

C.E. van Kraayenoord 21

Curricula continued

Then think about:


- How can you represent what the students have to learn in multiple ways?
- How can you engage the students in what they have to learn in different ways?
- How can the students express what they have learned in a variety of ways?

C.E. van Kraayenoord 22

Your turn

C.E. van Kraayenoord 23

Your turn



- **A Big Idea =**
The butterfly has a life cycle (egg-caterpillar-cocoon-butterfly)
- How can you represent the idea of the life cycle in multiple ways?
- How can you engage the students in learning about the life-cycle in different ways?
- How can the students express what they have learned about the life cycle in a variety of ways?

C.E. van Kraayenoord 24

Teaching

Teaching with attention to:
Representation
Engagement
Expression

- Use different teaching approaches and methods
 - explicit instruction, inquiry learning, computer-assisted learning
- Use different types of classroom organization
 - whole class teaching, cooperative groups, peer tutoring

C.E. van Kraayenoord 25

Teaching continued

- Allow students to get information in different ways
 - from the computer, books and magazines, DVDs
- Allow students to present information in different ways
 - take photos, acting, create a PowerPoint
- Encourage metacognition
 - Let students talk about their thinking
 - Let students share the strategies they use to learn

C.E. van Kraayenoord 26

Assessment

Assessment with attention to:
Representation
Engagement
Expression

- Use tests and classroom tasks that are administered in various ways
 - Written, oral, multimedia
- Create rubrics with various levels of performance (Lieberman, Lytle, & Clarq, 2008)
- Use assessment tasks with different formats
 - For example, if a written test it could be: multi-choice, an essay, or a short answer test

C.E. van Kraayenoord 27

Assessment - continued

- Ask students to self-assess and rate their own progress

C.E. van Kraayenoord 28

Evidence (From Meo, 2008)

- A relatively new framework so literature is still evolving
- Empirical studies documenting the impact of UDL have mostly been undertaken in the literacy domain (Dalton, Pisha, Eagleton, Coyne, & Deysher, 2002; Proctor, Dalton & Grisham, in press)
 - Positive outcomes for struggling readers

C.E. van Kraayenoord 29

Principles of UDL are based on research-proven instructional approaches (from Meo, 2008)

- Differentiated instruction (Tomlinson, 1999)
- Teachers as coaches or guides (O'Donnell, 1998)
- Learning as process (Graves, Cooke & Laberge, 1983)
- Cooperative learning (Johnson & Johnson, 1986)

Common to these approaches = teachers support learning, rather than impart knowledge and students construct knowledge rather than passively receive it

C.E. van Kraayenoord 30

The potential of UDL
When curricula, teaching and learning experiences and activities are based on Universal Design for Learning principles, then

- all students can be included
- students' needs as well as students' preferences in ways of working can be met (Scott, et al., 2003; Curry, Cohen & Lightbody, 2006; Pisha & Stahl, 2005)
- the curricula, instruction and assessment are flexible
- the need for accommodations and modifications later is minimized

C.E. van Kraayenoord 31

The potential of UDL - continued
When curricula, teaching and learning experiences and activities are based on Universal Design for Learning principles, then

- full access to content is provided for all
- instructional methods are varied so that they support and challenge all learners
- materials are flexible and varied and take advantage of all modes of reception and expression
- assessment techniques are sufficiently flexible to provide accurate information to inform teaching and establish students' knowledge and skills (Rose & Meyer, 2002)

C.E. van Kraayenoord 32

Conclusion

- Trying something new is sometimes difficult.
- But I hope you will try to use Universal Design for Learning when planning units of work and lessons for your students.
- It is an inclusive approach to meeting the needs of your students.
- It offers great flexibility.
- It will help your students learn and achieve.

C.E. van Kraayenoord 33

Website

- www.cast.org
 - UDL Tool kits – helps create UDL-based lessons and apply UDL principle (also for training others)
 - UDL Lesson Builder – helps create UDL-based lessons
 - UDL Book Builder – helps develop digital books with learning supports

C.E. van Kraayenoord 34

Thank you for listening

C.E. van Kraayenoord 35
