

# KEWL 3.0

Knowledge Environment for Web-based Learning



# Outcomes

By the end of this session, you should be able to:

Consider your *pedagogical approach* in designing a learning activity

Develop a **course outline**

Develop your **learning outcomes**

Use the KEWL environment

- Log in to KEWL
- Navigate your way around the system
- Add plugins
- Modify your profile
- Create a course



# Pedagogical integration

HE learner

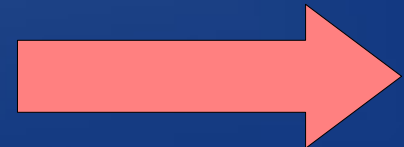
Approaches to learning



Deep



Surface



# Deep approach to learning

- Actively seek to understand the material / the subject
- Interact vigorously with the content
- Make use of evidence, inquiry and evaluation
- Take a broad view and relate ideas to one another
- Intrinsic motivation
- Relate new ideas to previous knowledge
- Relate concepts to everyday experience
- Tend to read & study beyond the course requirements



# Surface Approach to Learning

Learn in order to repeat what has been learned

Memorise information needed for assessments

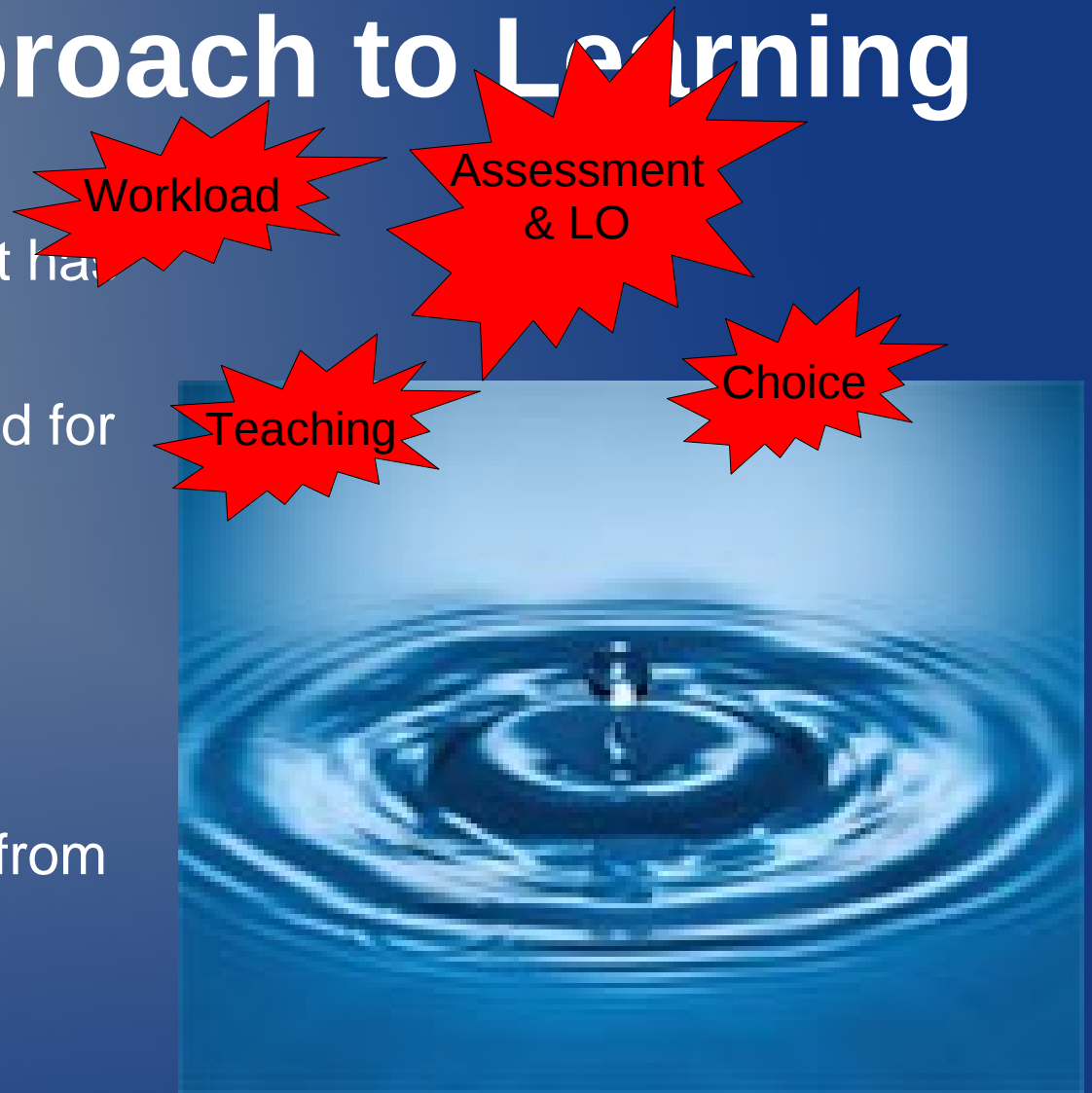
Make use of rote learning

Take a narrow view and concentrate on detail

Fail to distinguish principles from examples

Tend to stick closely to the course requirements

Are motivated by fear of failure

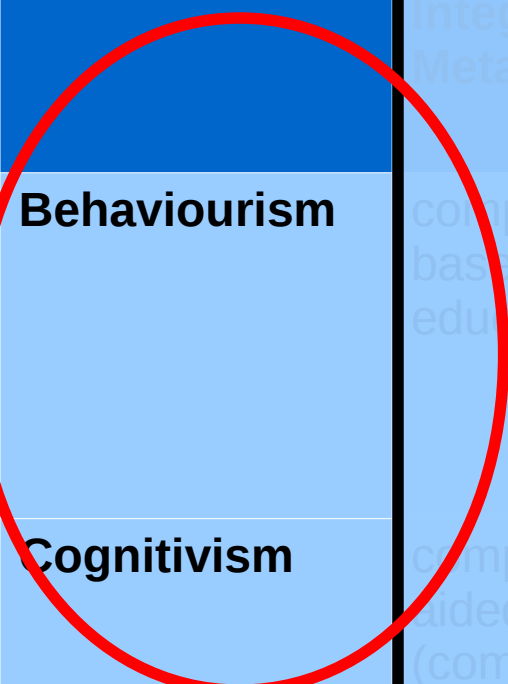


<b>Learning Theories</b>	<b>ICT Integration Metaphor</b>	<b>Key Learning Concepts</b>	<b>Learning design principle</b>	<b>Concept of LEARNER-CENTREDNESS</b>	<b>Instructional Role of the TEACHER</b>
<b>Behaviourism</b>	computer-based education	reinforcement shaping	programmed instruction	learners proceed at their own pace	<b>manager</b> of reinforcement contingencies
<b>Cognitivism</b>	computer-aided (computer-assisted) education	hard-wiring information processing	systematic instruction (e.g. drill & practice)	learners have inborn possibilities and constraints as thinkers	<b>instructor</b> of thinking procedures
<b>Constructivism</b>	computer-enabled education	action/activity internalization	activity-based learning	learners actively construct their own knowledge	<b>facilitator</b> & mediator
<b>Connectivism</b>	Web-enabled education	social participation externalization	collaborative learning	learners form their identity in virtual communication	<b>manager</b> of collaborative learning environments

*REF: Moll, I. (2010, Forthcoming) Learning and computing: theoretical perspectives on the pedagogic integration of ICTs. In McCabe, K. & van Wyk, K. (Eds.). Teaching and e-Learning. Cape Town: Macmillan. (Pre-publication version).*

	ICT Integration Metaphor	Key Learning Concepts	<b>Transmission</b> Structured info Building core/foundational Competence	Concepts of LEARNING	Role of the Instructor
<b>Behaviourism</b>	computer-based education	reinforcement shaping		learners proceed at their own pace	<b>manager</b> of reinforcement contingencies
<b>Cognitivism</b>	computer-aided (computer-assisted) education	hard-wiring information processing		learners have inborn possibilities and constraints as thinkers	<b>instructor</b> of thinking procedures
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Instructor based  
Container to be filled  
Long dev. time





# Transmission

- How do we cater for knowledge gaps & core knowledge acquisition?
- Balance between diff. LDs in lower level courses cf to high level course.
- How do we ensure that students are learning the 'right' things wrt core of knowledge in the discipline.  
Readings, lectures, text, artefacts, bodies of knowledge content etc

**Behaviourism**

**Cognitivism**

**Constructivism**

**Connectivism**

**Transmission**  
Structured info  
Building core/foundational  
Competence

**Emergence**  
Reflection and Reasoning  
Metacognition,  
Reflection on life experience  
'Guide on the side'  
Deep learning, relevance  
HOTS

Instructor based  
Container to be filled  
Long dev. time

Time consuming  
Learner needs high competence  
in subject matter &  
Familiarity with approach

# Emergence

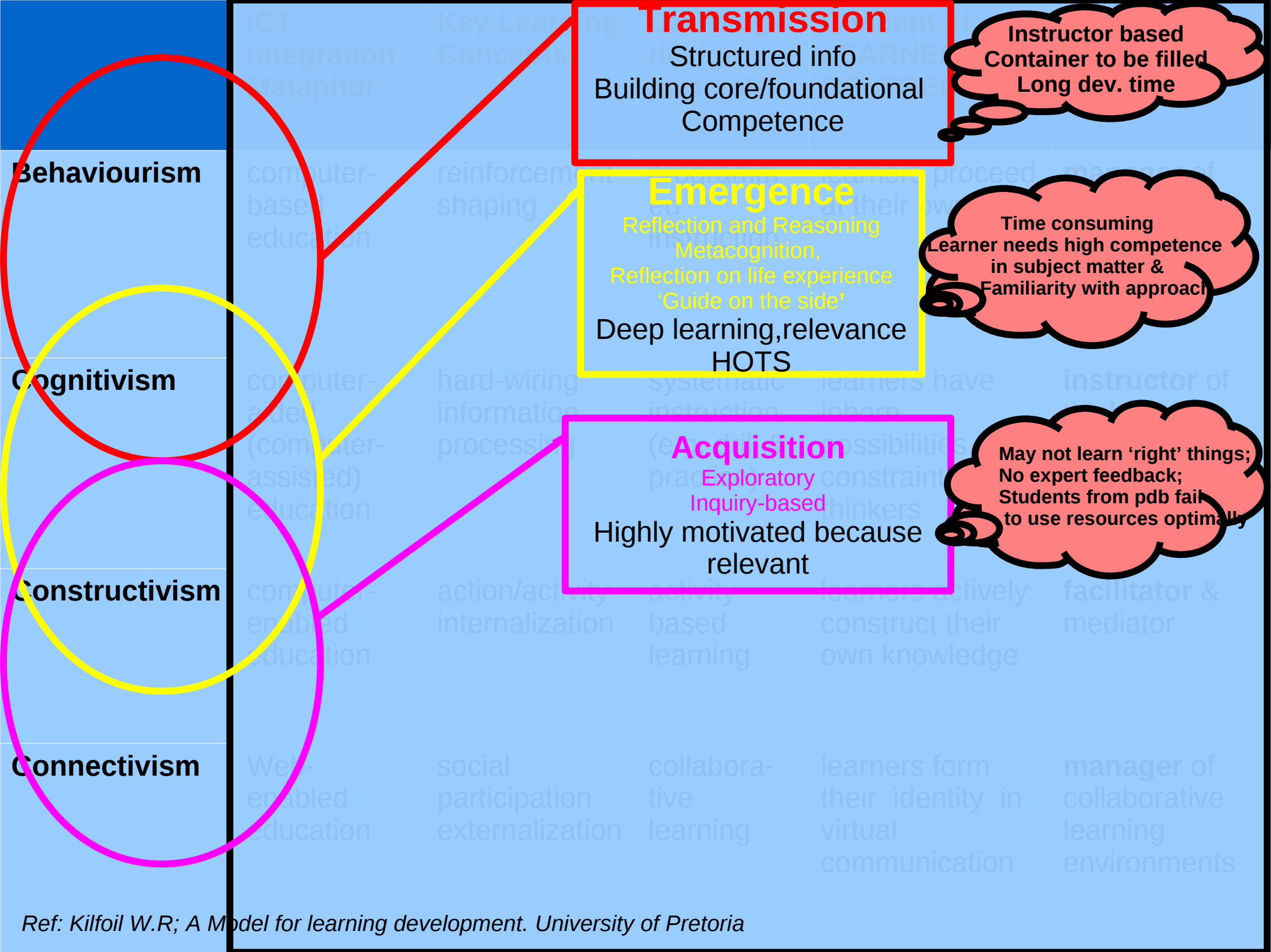
Design to include student knowledge & experience.

Design to get students to consciously reflect on what it is they are learning or their experience in order to transform into learning eg reflective journals, discussion, debate, summarising

Design for active engagement with curriculum allowing construction of knowledge.

Embed metacognitive strategies in content

for eg chapter summaries, overviews, sequence and relationship cues, and study questions, generic self-monitoring checklists.



**Behaviourism**

**Cognitivism**

**Constructivism**

**Connectivism**

**Transmission**  
 Structured info  
 Building core/foundational  
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Instructor based  
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**Emergence**  
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Time consuming  
 Learner needs high competence  
 in subject matter &  
 Familiarity with approach

**Acquisition**  
 Exploratory  
 Inquiry-based  
 Highly motivated because  
 relevant

May not learn 'right' things;  
 No expert feedback;  
 Students from pdb fail  
 to use resources optimally

# Acquisition

Requires resource rich environment

- What knowledge resources are available through the institution?

Library(e-books)

Multimedia

Online resources

Lectures/guest speakers/seminars

Fellow students

Work -integrated learning-

- How to include experiential / problem based learning.

**Behaviourism**

**Cognitivism**

**Constructivism**

**Connectivism**

**Transmission**  
Structured info  
Building core/foundational  
Competence

**Emergence**  
Reflection and Reasoning  
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Deep learning, relevance  
HOTS

**Acquisition**  
Exploratory  
Inquiry-based  
Highly motivated because  
relevant

**Accretion**  
Continuous  
Embedded learning  
High relevance,  
Broad range,  
Continuous,  
Authentic learning

Instructor based  
Container to be filled  
Long dev. time

Time consuming  
Learner needs high competence  
in subject matter &  
Familiarity with approach

May not learn 'right' things;  
No expert feedback;  
Students from pdb fail  
to use resources optimally

Unfamiliarity  
with  
process

# Accretion

- foster the ideal knowledge ecology to permit learning to occur
- provide students with a rich array of tools and information sources to use in creating their own learning pathways.
- bring in diversity of opinions
- accommodate for current, rapidly changing, networked knowledge in curriculum.
- develop the ability to see patterns and connections between fields, ideas, and concepts.

# Accretion

- How do we foster the ideal knowledge ecology to permit learning to occur?
- How do we provide students with a rich array of tools and information sources to use in creating their own learning pathways?
- How do we bring in the widest diversity of opinions?
- How do we design so that there is space in the curriculum for current, rapidly changing, networked knowledge?
- How do we develop the ability to see patterns and connections between fields, ideas, and concepts?



## Content Creation

File Manager  
Course Content  
FAQ's  
Glossary  
Announcements  
Podcasts

## Communication & Collaboration Tools

Discussion  
Work Groups-discussion, assignments  
Blogs  
Wiki's  
Virtual Classroom  
Calendar

## Assessments

MCQ's  
Assignments  
Essays  
Online worksheets  
Problem Based Learning  
Respondus

## Evaluation/Grading Tools

Rubrics  
Grade Book  
Turnitin

## Web 2.0 Tools

Wiki's  
Facebook  
Twitter

## Features

Filters  
Blocks  
Integration with University Academic & Authentication systems  
Simple user interface  
Local support  
Ability to customize

# KEWL Environment

- **Login**
  - Lecturer login
  - Student login
- **My Workspace**
  - My profile
    - **Update details,image etc.**
    - **Calendar- personal & public**
    - **File Manager**
    - **Blog-personal blog- gets posted on main page**

# KEWL(cont.)

- My Courses
  - Create a course
    - Course settings
    - Course Information/Outline
    - Course Outcomes

# Course Information

- **Description of course**
- **Existing knowledge and skills required**  
(useful for second- and third-year course outlines)
- **Teaching method**
- **Student assessment/s**
  - Formative**
  - Summative**
  - Criteria**
  - Plagiarism**
- **Reading List**
-

# Learning Outcomes

An outcome is something that the student must **know** and be able **to do** by the end of your session/course/module with them.

All outcomes should complete the sentence:

***By the end of this session/course/module, students should be able to...***

Need to be aligned with both teaching and assessment task/s

# Why focus on outcomes?

- defines **competencies** to be achieved in terms of **skills**, **content mastery**, **attitudes**, or **values**.
- forms the basis upon which to **select or design** instruction materials, content, or techniques i.e. to devise appropriate reflection activities.
- provides the basis for **determining or assessing** when the instruction purpose has been accomplished i.e. to develop appropriate assessment techniques.
- provides a **framework** within which a learner can organize her/his efforts to complete the learning tasks.
- Ref:[http://www.thelearningmanager.com/pubdownloads/developing\\_clear\\_learning\\_outcomes\\_and](http://www.thelearningmanager.com/pubdownloads/developing_clear_learning_outcomes_and)

# How to develop outcomes

- **Audience** - what level/ability/etc
- **Behaviours** -observable verbs
- **Conditions** - what circumstances
- **Degree**- how well

**Given a bar, line, or circle graph, the seventh-grade mathematics students will be able to verbally present all the statistical or numerical information shown on the graph with 100% accuracy.** <sup>1</sup>

# How to develop outcomes(cont.)

- **Outcomes = Conditions + Performance +  
Criteria**



# References

- <http://www.slideshare.net/ashleytan/writing-specific-instructional-learning-objectives-presentation>
  - [http://www.thelearningmanager.com/pubdownloads/developing\\_clear\\_learning\\_outcomes\\_and\\_objectives.pdf](http://www.thelearningmanager.com/pubdownloads/developing_clear_learning_outcomes_and_objectives.pdf)
- <http://www.uwsp.edu/education/lwilson/curric/newtaxonomy.htm>
- <http://www.stthomasu.ca/publications/teaching/fall2003/moore.htm>

<http://www.ucd.ie/teaching/printableDocs/Good%20Practices%20in%20T&L/deep%20surface&stragtic%20approac>

• Moll, I. (2010, Forthcoming) Learning and computing: theoretical perspectives on the pedagogic integration of ICTs. In McCabe, K. & van Wyk, K. (Eds.). *Teaching and e-Learning*. Cape Town: Macmillan. (Pre-publication version).