



Virtual Skills Lab

Une contribution genevoise au Campus Virtuel Suisse

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Commission d'Enseignement
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virtualskillslab.net

Plan

- Computer-Assisted Instruction and Web-based learning

- Swiss Virtual Campus

- Virtual Skills Lab

Project description

Organisation

Achievements

Future prospects

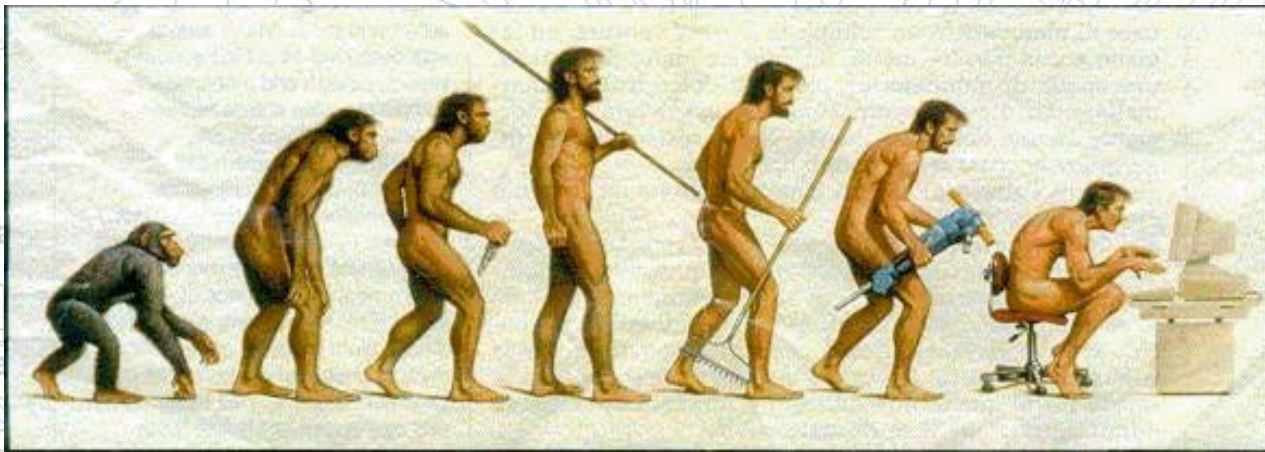
Computer-Assisted Instruction

Claimed benefits

- Control by learner over content
- Time and place of learning
- Enhancement of learning, reasoning and efficiency
- Cost savings

Web-Based Learning

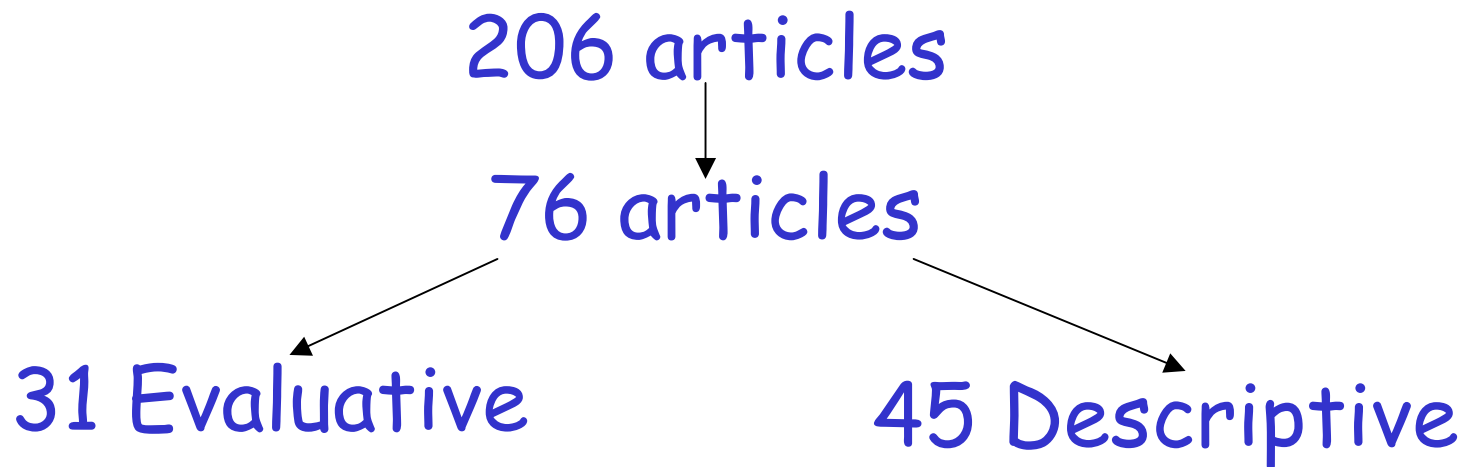
- Universal accessibility
- Ease in updating content
- Hyperlink functions



Performance as a learning medium ?

Web-Based Learning: Sound Educational Method or Hype? A Review of the Evaluation Literature

Chumley-Jones HS, Dobbie A, and Alford CL
Acad Med 2002;77:586-593



Knowledge Gains ?

- WBL result in knowledge gains
 - 5 pretest/posttest studies
- WBL do not outperform other educational methods
 - 4 WBL group and a group control studies
 - 1 assigned crossover study
 - 3 randomized controlled trials

Learners' Attitudes

- Most learners prefer WBL to:
 - Slide/tape
 - Text-based material
 - CME, lectures
- Can improve learners' confidence
 - Similarly to other educational methods
- What predict learners' satisfaction ?
 - Accessibility, navigation, attractiveness
 - DOWNLOAD SPEED

Learners' Attitudes (2)

- Effect of asynchronous interactions with faculty and peers on learning ?
- Pattern of Web use in WBL ?
- Does WBL stimulate learning ?

Efficiency of learning

- Students may learn more efficiently (?)
 - One randomized controlled trial comparing WBL with text-based learning

Costs of WBL Programs

?

Conclusions

- Educators still must define WBL's unique educational contribution.
- Most learners welcome WBL and give high satisfaction ratings, but there is no evidence that students learn more from Web-based programs than by traditional methods.

Conclusions

- Educators must tailor their teaching media to learners' needs rather than assume that WBL is intrinsically superior.
- Trials would clarify the most appropriate use of WBL in medical education.



Swiss Virtual Campus

www.virtualcampus.ch



Goals of the SVC

- Development of Internet-based course modules:
 - Encourage the use of new information and communication technologies.
 - Improve the quality of learning processes by including interactive teaching.
 - Have a clear pedagogical goal.
 - Promote collaboration within Switzerland's higher education system.
 - Support a mutual certification of qualification.



General conditions

- 30 Mio from the federal government.
- Universities make a financial contribution to the projects (at least 50%).
- 3-year projects.



Medicine

- Computers for Health
Univ. GE, BS, BE, LA, ZH, EPFL
- Basics of Medical Statistics
Univ. BS, LA, GE, BE, ZH
- Immunology Online: Basic and Clinical Immunology
Univ. LA, BS, BE, GE, ZH
- Basic and Clinical Pharmacology: A National Platform for Students in Medicine and Pharmacy
Univ. ZH, LA, BS, BE, GE
- Virtual Skills Lab
Univ. LA, BE, GE, ZH, BS



A Swiss Virtual Campus Project

Prof. F. Bosman, Dr. R. Bonvin

VSL in Geneva

- Pr Charly Bader
- Pr Bengt Kayser
- Dr Philippe Huber PD
- Dr Maria-Pia Bianchi
- Dr Pierre-André Guerne PD
- Dr Bernard Vermeulen PD
- Pr Nu Viet Vu
- Members of the Clinical Skills Program

Description



General Aims of VSL

- Improve learning of clinical skills.
- Prepare students for patient encounter.
- Provide a multilingual teaching tool.
accessible independently of time and place.
- Unify teaching approaches of clinical skills in Switzerland.

General Requirements

Allow a flexible integration into the various Swiss medical curricula

- Effort to achieve unity of content and structure.
- Provide customized content and structure where necessary.
- End product is flexible and customizable.
- Supports different modes of curriculum integration.

Target Audiences

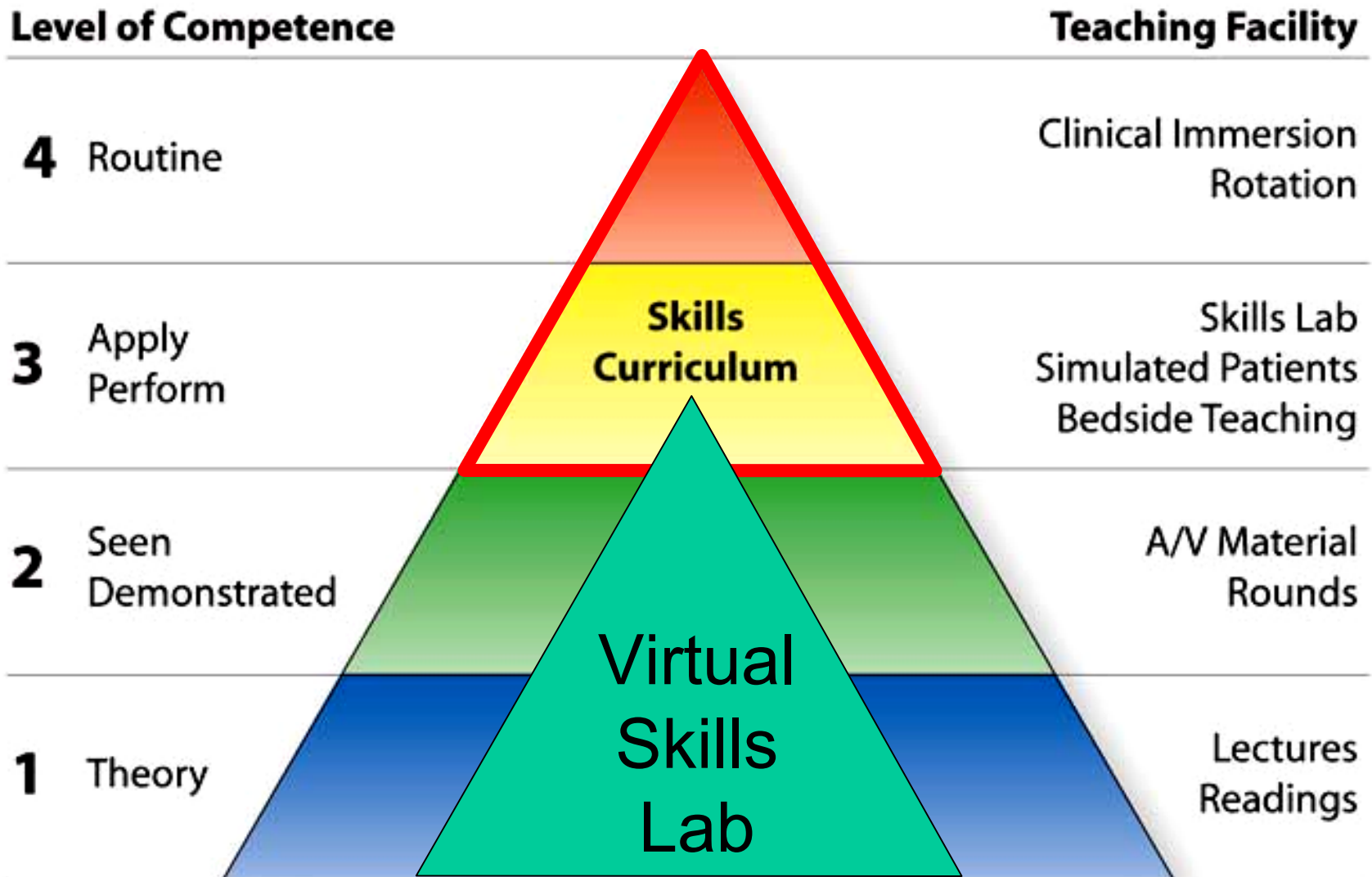
- Learners
 - Medical students in clinical years.
- Examinees
 - Medical students preparing for clinical assessment.
- Teachers
 - Junior or senior residents involved in pre-graduate clinical teaching.

Content

Clinical Skills based on Swiss Catalog
of Learning Objectives

13 Organ-System-Based Modules

Levels of Competences



Module Dispatching (1)

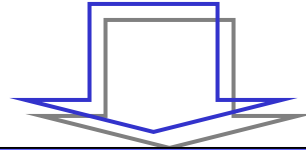
Module	Site
1. History taking	ZH
2. General examination, inspection, skin	ZH
3. Pediatrics	BE
4. Emergency Dr B Vermeulen	GE
5. Communication and psychiatry	n/a
6. ORL	n/a
7. Respiratory system	VD

Module Dispatching (2)

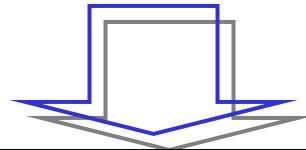
Module	Site
8. Cardiovascular system	ZH/VD
9. Abdomen	BE
10. Neurology	ZH/BE
11. Joints, bones and muscles Dr PA Guerne	GE
12. Obstetric, gynecology and uro-genital system	VD
13. Other diagnostic and therapeutical skills	n/a

Segmentation of VSL

Module

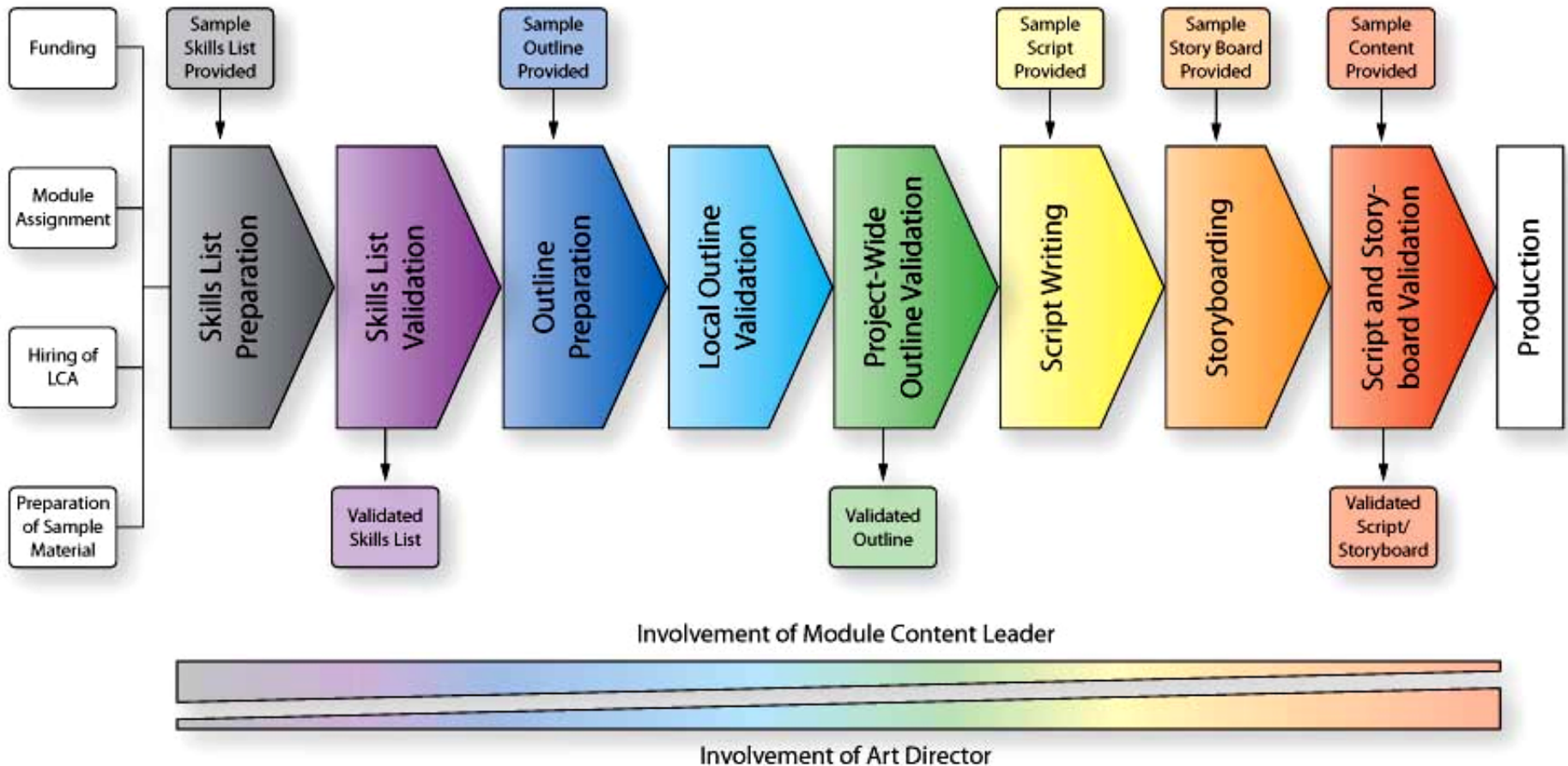


Units
(didactical meaningful)

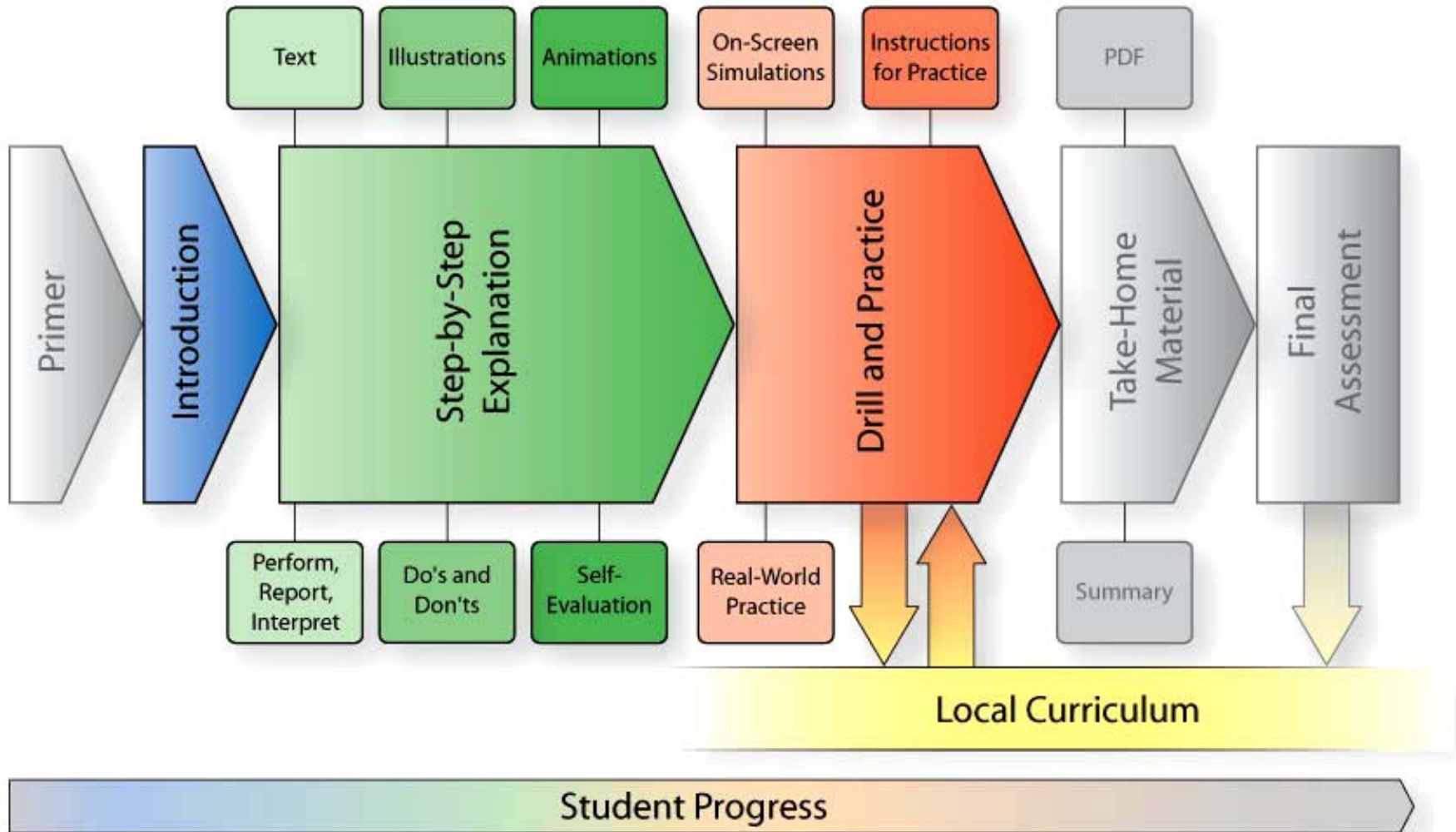


Skills
(clinical meaningful)

Module Content Definition



Skill Structure



VSL Implementation

Substitutive



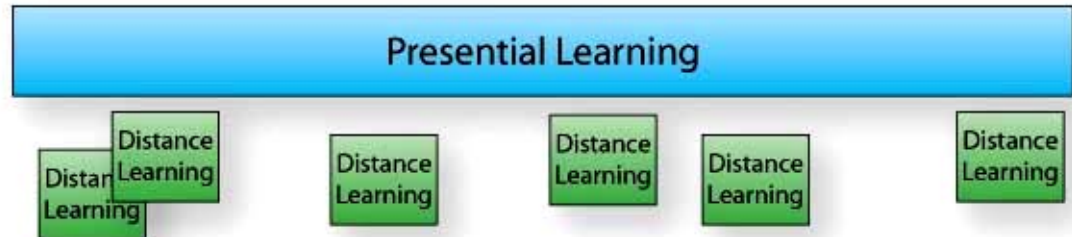
Sequential



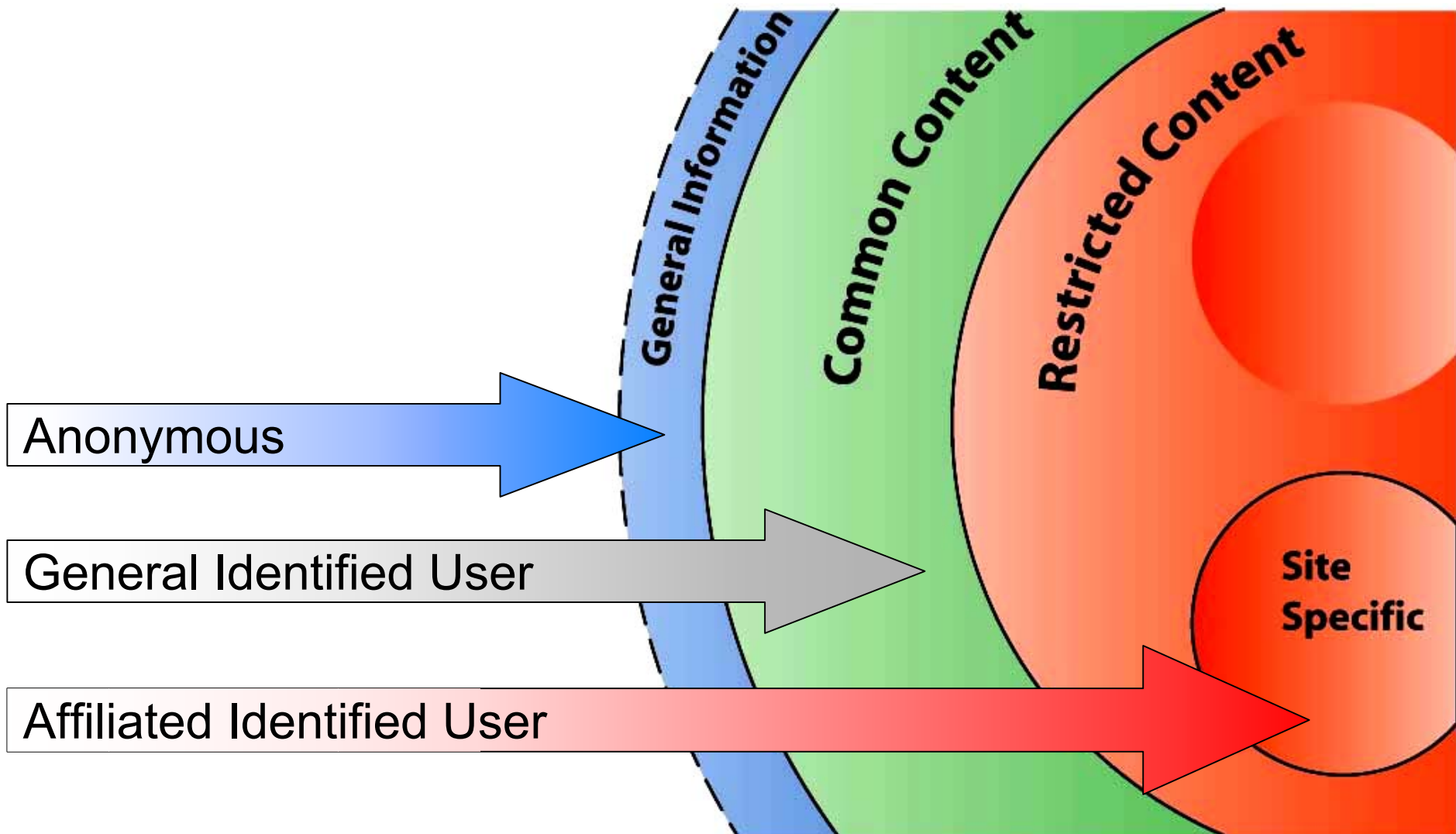
Accompanying



Lacking



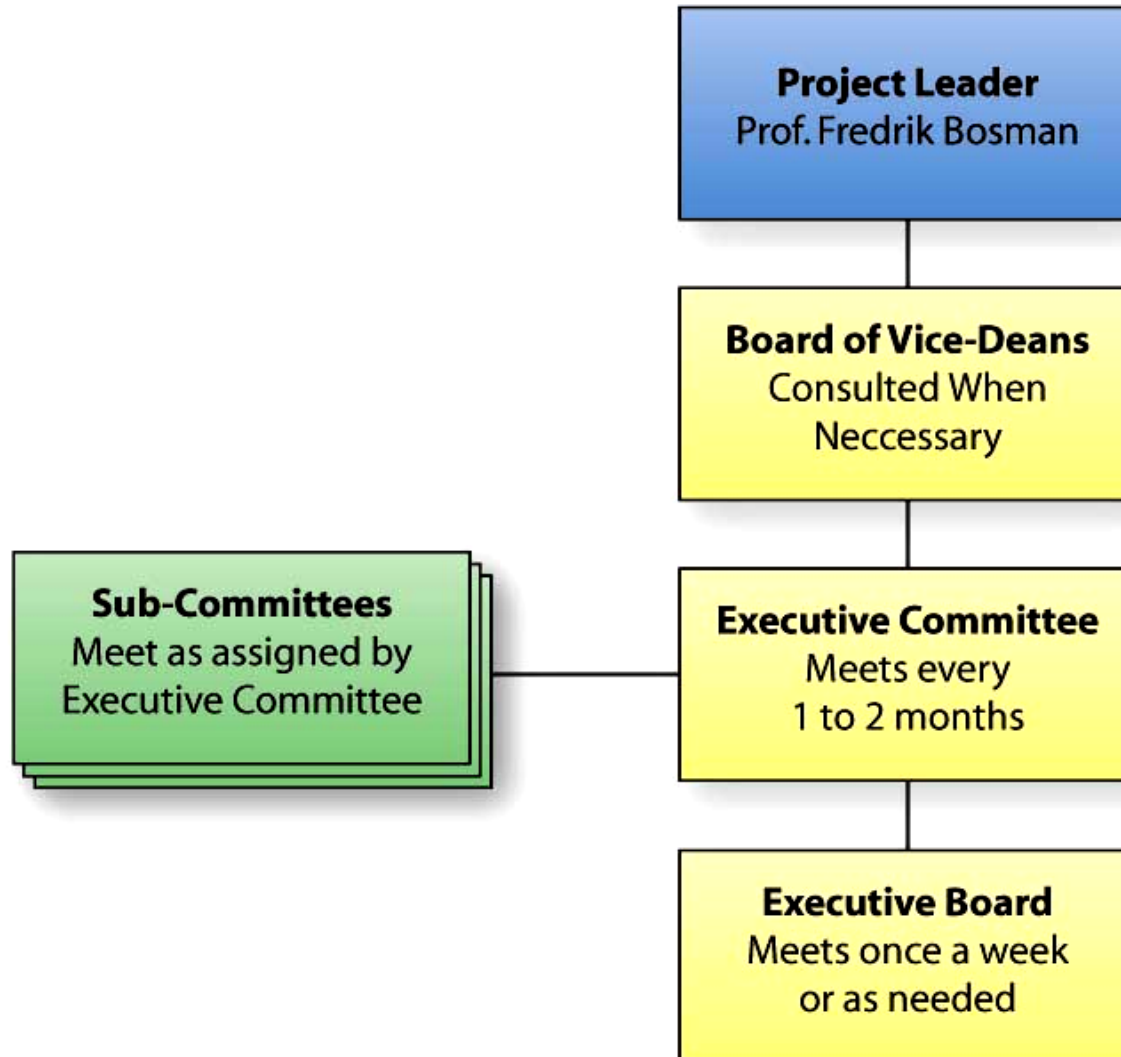
VSL Accessibility



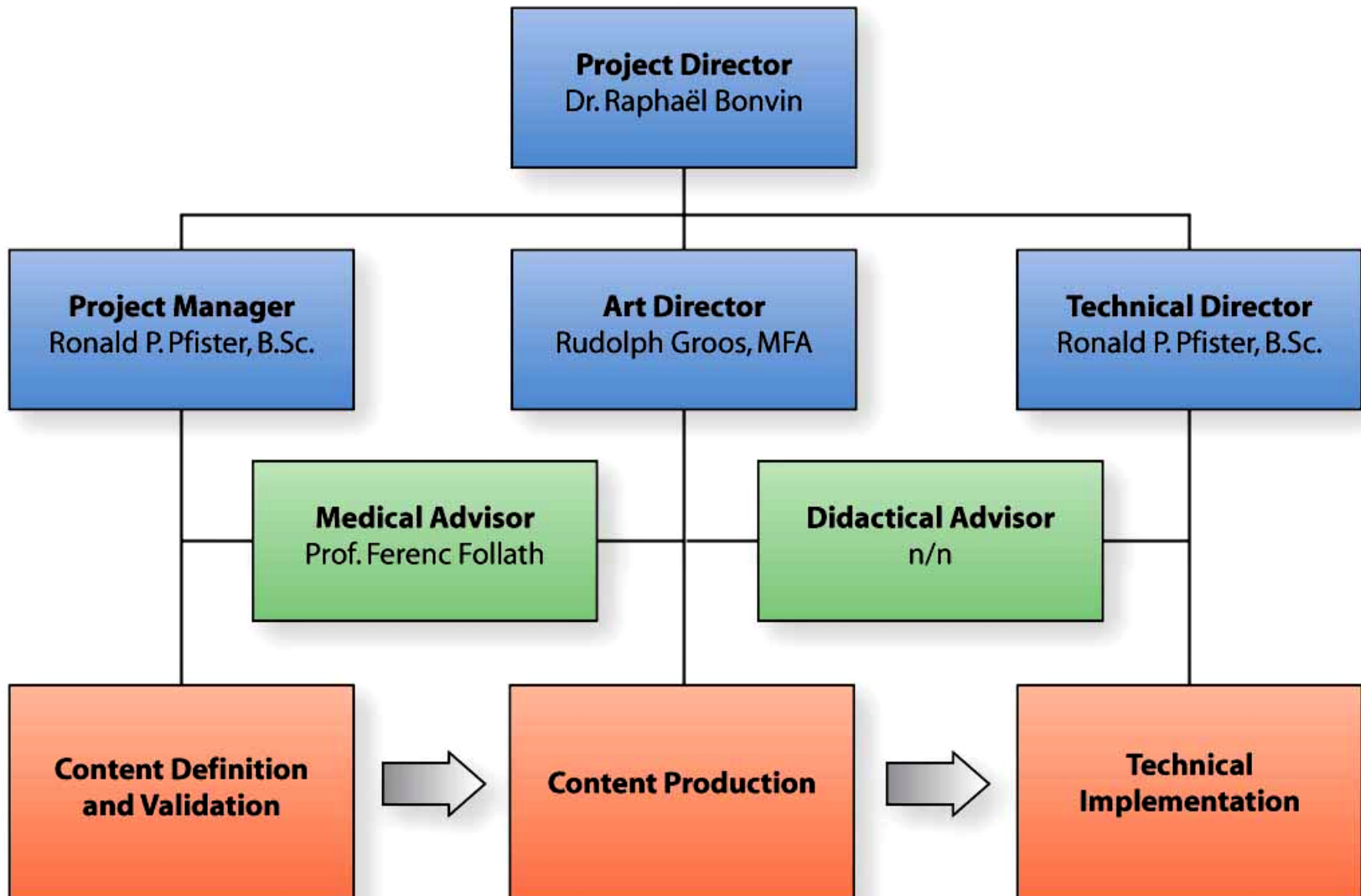
Organisation



Steering Structure



Executive Board



Executive Committee and LCA

- Prof. Ferenc Follath (Zürich)
 - Dr. Monika Vitzig
 - Liliane Follath
- Dr. Philippe Huber (Geneva)
 - Dr. Maria-Pia Bianchi
- Dr. Peter Frey (Bern)
 - Dr. Erik Strauch
- Dr. Raphael Bonvin
 - Dr. Patrick Kupper

Production Sites

Video, Sound, Graphics:

- CEMCAV (Lausanne)
- AUM (Bern)

Involved Partners

- Amazing Technologies
 - Daniel Mischler
 - Cyrill Rüttimann
- Solution Park
 - Thomas Gabathuler
- EduTech
 - Jacques Monnard
- CenTEF
 - Dr. Bahram Zaerpour



Achievements

Viability

- Successful Project "Transplantation"
- Interest and Enthusiasm
- Stabilized processes
- Extended Deadline to mid 2004

Content Definition

- 5 Modules "activated"
 - ZH: History Taking (90%), General Examination (40%)
 - GE: Bone Joints Muscles, Emergencies (50%)
 - LS : Ob-Gy (20%)
- Content Definition Tool (Amazing Tech.)
 - Late
- Validation Process
 - Will start soon

User Experience

- Definition and Prototyping of the User Interface (Solution Park, CEMCAV, AUM)
- Student recruitment for testing
- Involvement of Prof. Nu Vu (Geneva)

Deployment Tool

Technical prototypes scheduled for 1st half 2003

Financials

On track

Future Prospects



Curriculum Integration

- Top-down approach
 - Vice-Deans of Education
 - Curriculum Committee
- Bottom-up approach
 - Content Experts validation
 - Teachers Training
- Customisation
 - Early involvement with local Curriculum Designers

Evaluation

Project and Curriculum Integration

Pr Nu Viet Vu, 2003



Merci !