

D1 Seminar

How to Be a Terrible HE Teacher in 7 Easy Steps

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UR1 – ESIR
IRISA/Inria – Wide



Start Activity

- On post-its, based on **your experience** as a student
 - What **helped** you most to learn
 - What **hampered** you most
- In **groups** of 3-4
 - One **sentence** on ideal teaching



7 Rules to be a Terrible Teacher

Bad Rule 1: Focus on The Teacher

... rather than the learner

- What matters: what **students do & learn**
- But what is **learning**?
- Traditional approaches can be highly inefficient



Poh, Ming-Zher, Nicholas C. Wearable sensor for unobtrusive electrodermal activity." *Biomedical Engineering Online* 57.5 (2010): 1243-1252.

Blind W. Picard. "A wearable sensor for assessment of electrodermal activity." *IEEE Transactions on Biomedical Engineering*

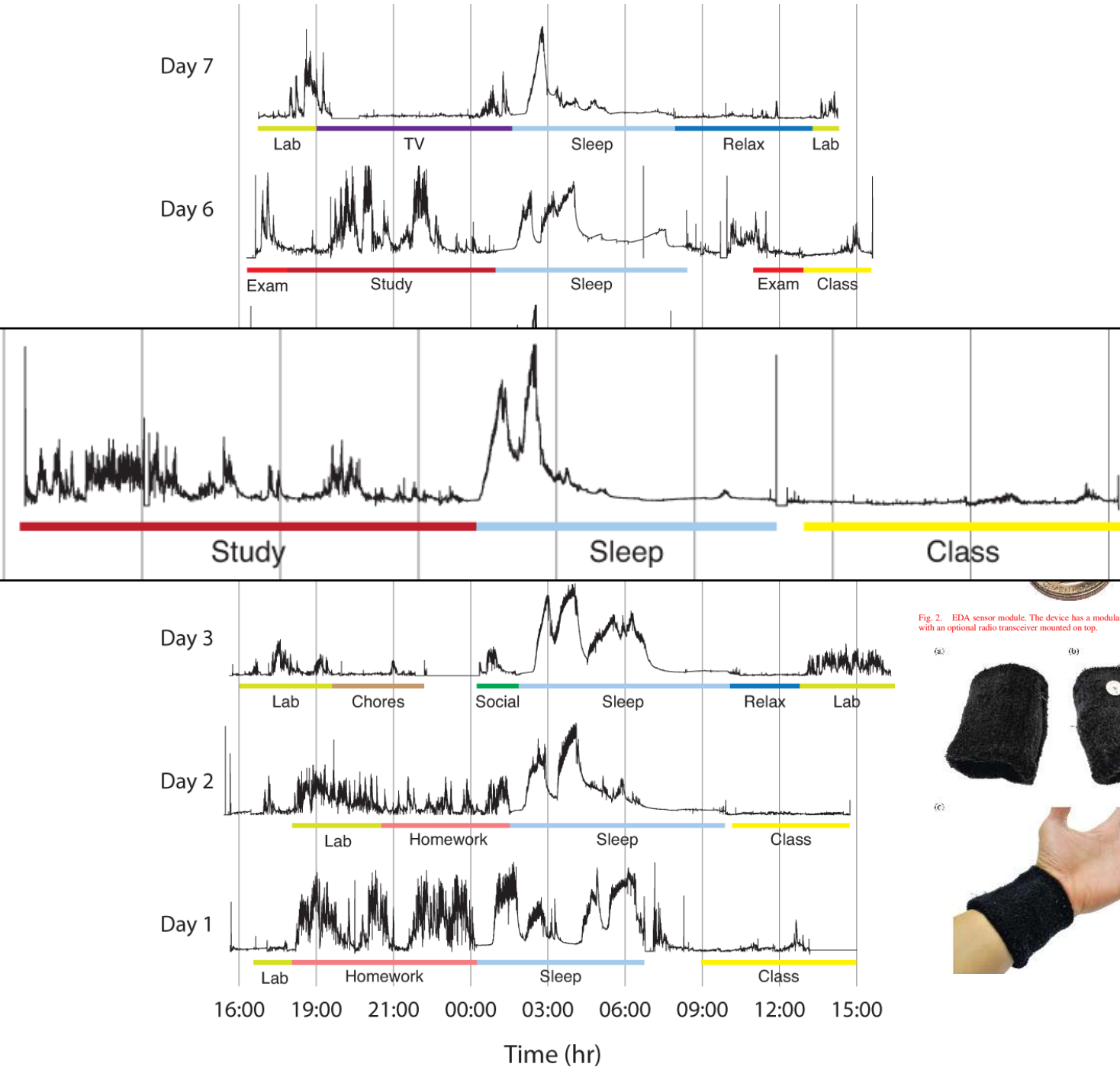
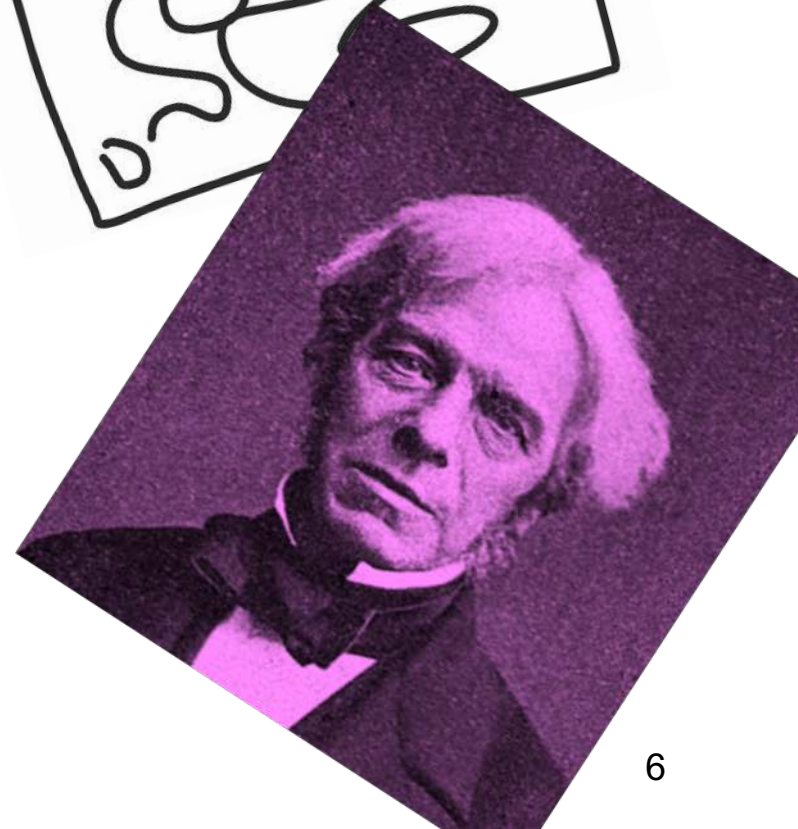


Fig. 2. EDA sensor module. The device has a modular design and is shown with an optional radio transceiver mounted on top.

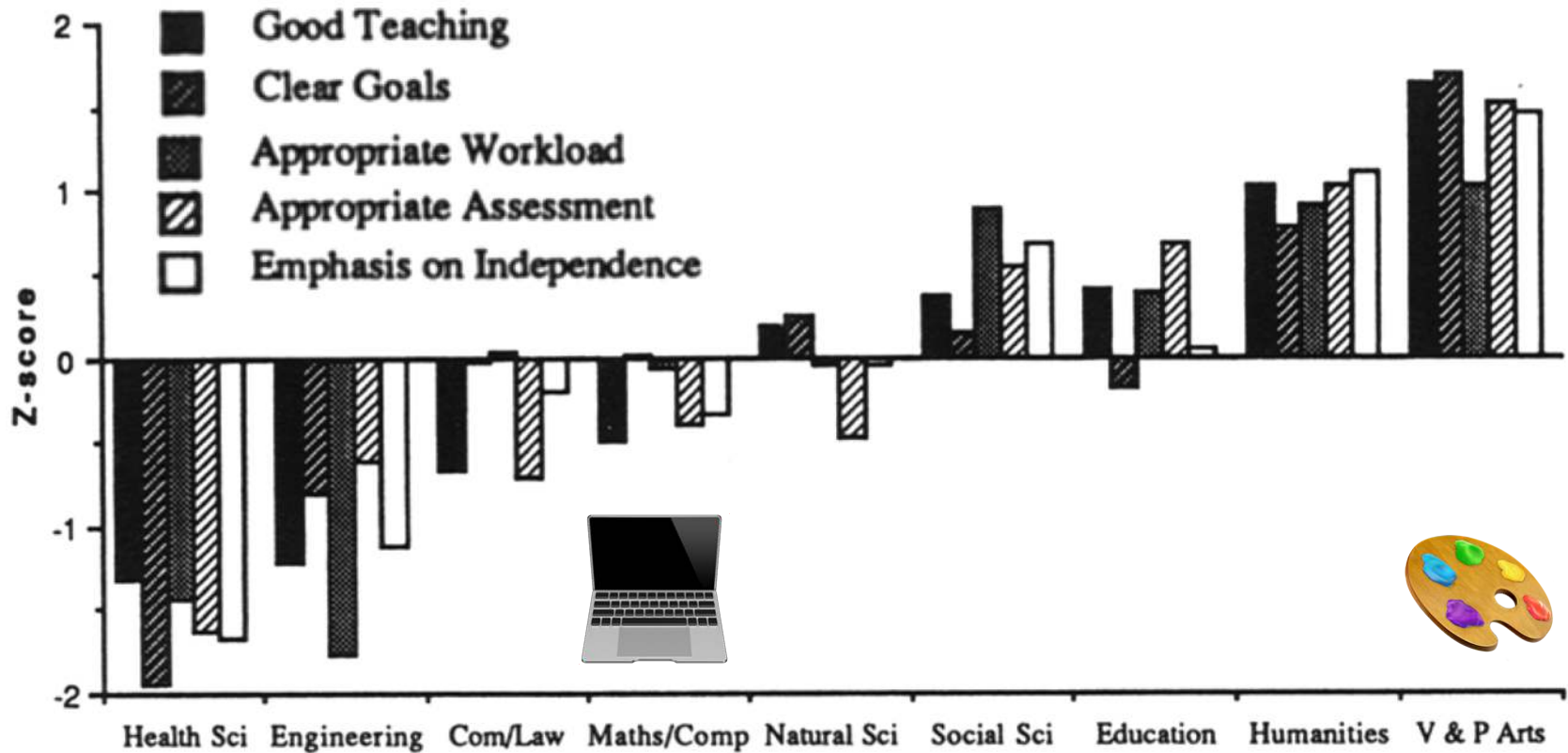


Bad Rule 2: Which Learning Goals?

- Meaning and purposes
- Structure and clarity
- Key to select content + activities



Student Perception Per Subject



Source: Ramsden (1991b)

Bad Rule 3: Feedback is Bad

- Feedback from and *to* you
- No feedback =
driving blindfolded
- Best feedback
 - Constructive and actionable
 - Timely
 - Part of a dialog

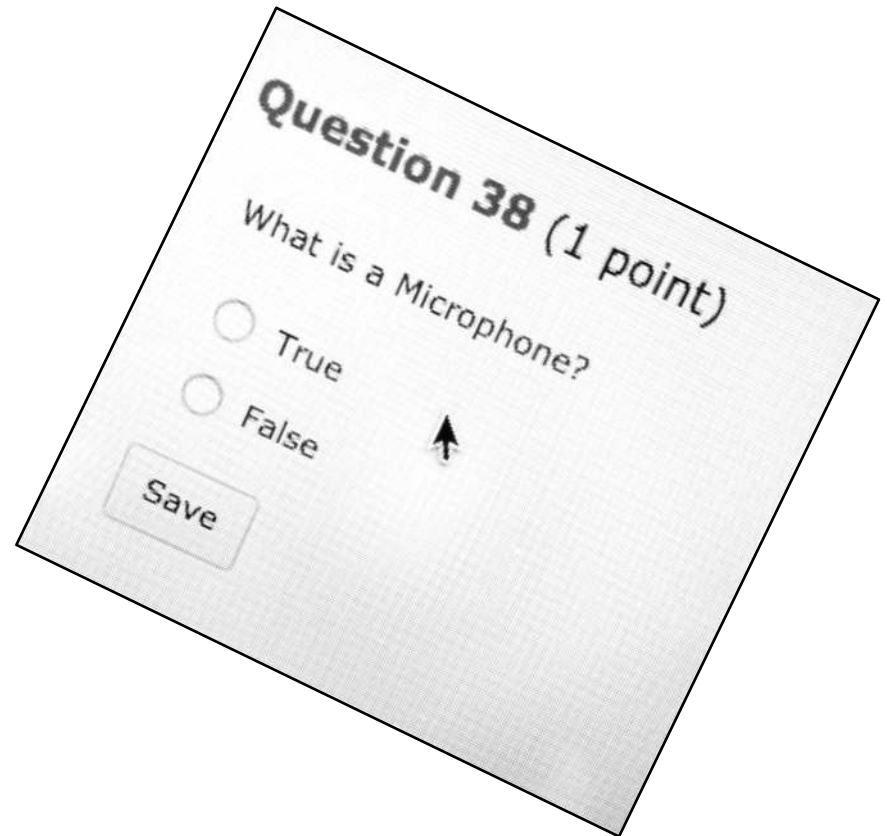


Start

- Distribuer poly du cours x2
- Permettre d'exécuter le code vous même
- Commandes systèmes plus tôt : besoin autres cours
- Plus insister sur l'assembleur / code du départ
- Commencer le TD (TP) plus tôt x4
- Une initiation avant les amphis

Bad Rule 4: Botch The Assessment

- A driven force of students' behaviour
- “Savvy” vs. “less informed” students
- Alignment with goals
- Transparency
- Feedback + Explanation



Mark: 7.58/20 (total score: 7.583/20)



+4/1/33+

ESIR SYS1 CC1 2013-2014
9 avril 2014

Nom et Prénom

Durée : 1h, Notation : sur 20 points

1 Première partie : QCM (10 points)

Instructions :

Cochez clairement la case de la réponse que vous pensez être juste. Il y a une seule réponse juste par question.

Barème :

+0.5 pour chaque réponse correcte
-0.5/m pour chaque réponse fausse (ou m+1 est le nombre de réponses possibles)

Question 1 Un code assembleur est directement exécutable par un processeur.

0.5/0.5

- vrai
 faux

Question 2 À quoi la second ligne du code suivant est-elle équivalente ?

```
char* s = "Hi!";  
*(s+1) = 1 ;
```

0.5/0.5

- s = s + 1
 s = 0
 s[1] = 1

Question 3 Dans le langage C, combien d'octets occupe une valeur de type int ?

SYS1-S6 CC1

<https://project.auto-multiple-choice.net>

Bad Rule 5: Pain is Quality

- ... and Quantity is Quality
- Particularly French bias
- Enthusiasm and joy
- Slow = long lasting
- Student's choice
 - To challenge oneself
 - To go beyond what is expected

Les devises Shadok



SI ÇA FAIT MAL C'EST QUE
ÇA FAIT DU BIEN !!

Bad Rule 6: Learning is Solitary

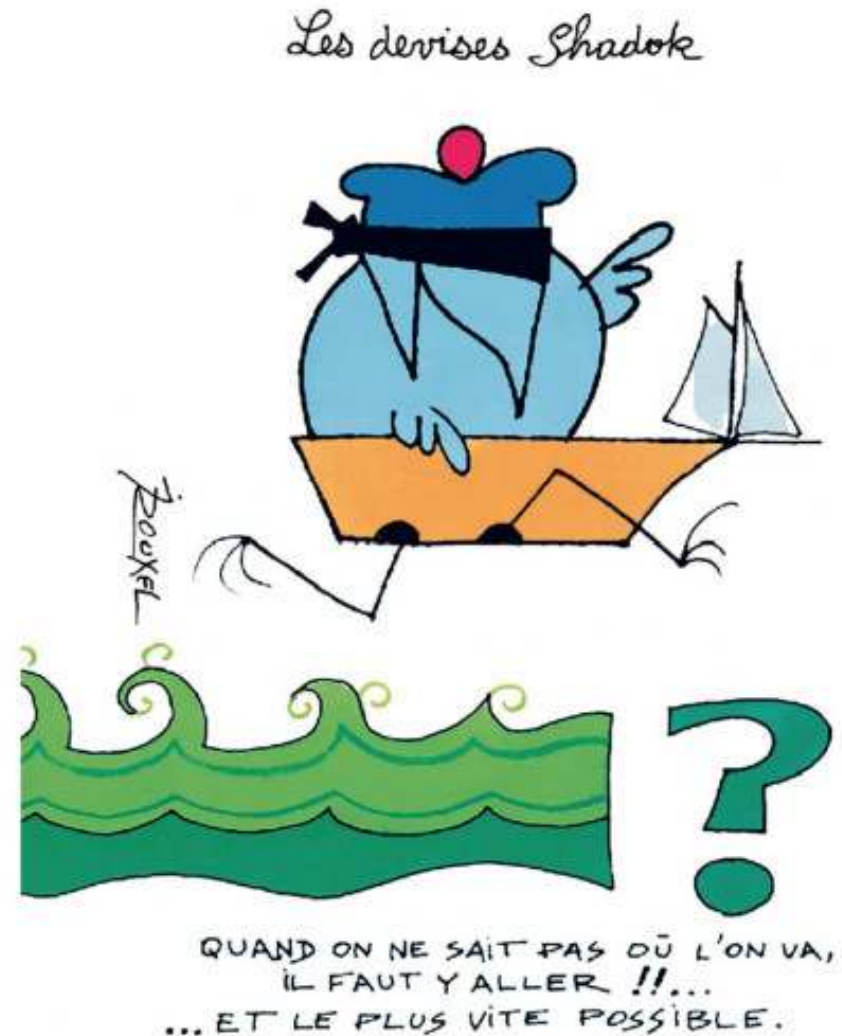
- Humans are **social** animals
- Knowledge is a social **construction**

- Group activities
 - Student **engagement** + satisfaction
 - Group **cohesion**
 - Better **learning**



Bad Rule 7: Never Look Back or Ahead

- Education research is old, rich, vast
- New students, new topics, new challenges
- Some personal questions
 - How to maintain **attention**?
 - **Phone**/laptop ban?
 - Drop **slides** entirely?
 - **What** should we teach?
 - Balance **theory/technology**?



What has it got to do with me?

In Labs / TP

- Provide **context** and perspective
which you need to understand yourself
- Regularly **check** how students are doing (feedback to you)
- Provide **formative** feedback when needed
Constructive, interactive
- Highlight / **clarify** to the class what is not understood
- Provide **pointers**, but not solutions (focussing on learning)

Some References

- Learning to Teach in Higher Education
Paul Ramsden (1st edition 1992)
→ A classic, fundamentals rather than set of tricks
- Teaching Matters blog @ U. Edinburgh
→ <https://www.teaching-matters-blog.ed.ac.uk/>
- Innovation Pédagogique (collectif)
→ <https://www.innovation-pedagogique.fr/>
- De la créativité à l'innovation (JC Cailliez)
→ <http://blog.educpros.fr/jean-charles-cailliez/>
- ...

