

# Contribution of e-learning to addiction teaching

## A successful experience at the University of Bordeaux, France

CPDD – Palm Springs – June 11-16, 2016

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Conflict of interest statement: None  
Funding: University of Bordeaux



# Abstract

**Aim:** New information technologies and communication media have a potential to improve teaching. Our objective was to describe the new e-learning course of addiction medicine at the University of Bordeaux (France, EU) and to provide evidences of success.

**Program description:** This course is intended for students of medicine, psychiatry, neurosciences, and midwives. It has an hybrid structure, mixing distance learning and on-site workshops. Students are instructed to connect to an online platform (Moodle), to study by themselves short videos designed by the teachers (10 to 20 minutes sequences, for a total of 90 minutes). To ensure comprehension of key concepts, students must validate a quiz to unlock a new video. Otherwise, they are invited to review the problem areas. Documentation to download is proposed to complete videos. Students can ask questions directly to the teachers via an online forum. Answers remain visible for all. At the end of the semester, a face-to-face workshop is proposed with a teacher, in small groups (20 students). Content is determined by the performance of students with quiz, and addresses clinical cases. Finally, students are asked to fill a form to improve the program.

**Results:** Since 2012, 2000 students were involved. Validation of the online quiz (distance learning) varied between 85% and 96% of the students. Workshops participation increased from 80% to 95% (face-to-face learning). We noted a remarkable increase in participation, since less than 20% of the students participated in the previous usual group conference teaching process.

**Conclusion:** This e-learning program provides quality education for addiction. Students where able to organize themselves and take into account their optimal time for study, which allowed more participation. We think that stepped e-learning combined with small-group workshops is a very efficient method to make addiction teaching more accessible and valid.

# Introduction

- Improving teaching: an endless challenge
- How to reduce Students missing classes at French universities?
  - Medicine lectures: **80% absents** (Master's degree)
- Development of **e-learning** in France
  - New educational opportunities
  - **Application to addiction teaching?**

# Objectives

- To **describe** the new e-learning course of addiction medicine at the University of Bordeaux (France, EU)
- To provide **evidences of success**



*“Modular Object-Oriented Dynamic Learning Environment”*

- e-Learning platform (v. 3.0.3)
- Free & open source, community (Moodle Project)
- Teachers can create personalized learning environments
- Easy to use



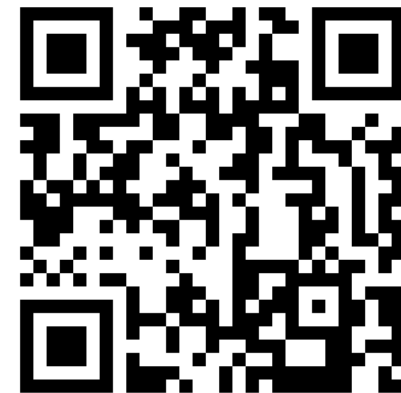
# Program description

- Students of Medicine, Psychiatry, Neurosciences and Midwives (>500 per year)
- **Combined structure**
  - Online learning and evaluation
  - Onsite workshop
- **Online platform**

<https://formatoile2.u-bordeaux.fr>

université  
de BORDEAUX


moodle







# Online learning – Structure

Forum (news & questions) →

 [Note d'information](#) 107.2Ko document PDF

 [FORUM POUR VOS QUESTIONS SUR LE COURS](#)

 [Forum des nouvelles](#)

Doc. to download →

 [Polycopié du cours](#) 7.8Mo document PDF

*>> N'oubliez pas de télécharger ce polycopié  
Sa lecture est indispensable*

Tech. support →

 [Aide technique : comment autoriser l'ouverture des pop-up dans FireFox pour pouvoir lire les vidéos ?](#)


Chapter 1


Video →

Quiz →

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Section 1  
**Addictologie : Clarification et délimitation (Pr. Marc Auriacombe)**

 [Addictologie : clarification et délimitation \(11 min\)](#)

 [QUIZ A](#)


*>> Vous devez valider les quiz pour débloquer la suite du cours*


Complete Chapter 1  
to unlock Chapter 2  
(5 chapters to complete)


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Section 2  
**Addictologie : Perte de contrôle / Epidémiologie et comportement (Pr. Marc Auriacombe)**

*Non disponible à moins que : Vous atteigniez une note requise dans QUIZ A*

 [Perte de contrôle \(8 min\)](#)

 [Epidémiologie et comportement \(20 min\)](#)

 [QUIZ B](#)

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Chapter 1

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 [QUIZ B](#)

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# Online learning – Educational resources

**Addictologie**



- ◆ Rien à voir avec les substances
- ◆ Fréquent
- ◆ Grave
- ◆ Repérage fiable et facile
- ◆ Thérapeutiques efficaces

HQ videos with teachers

Online quiz to monitor students comprehension & progress

Comprehensive documentation



Question 1

Pas encore répondu

Noté sur 1,00

Marquer la question

Modifier la question

**En cas de complication d'une intoxication chronique avec une substance pouvant donner lieu à addiction, il faut**

Veuillez choisir une réponse :

- a. Déterminer de façon urgente si la personne est dépendante ou pas
- b. Rechercher en priorité des complications d'intoxication aiguë
- c. Après avoir caractérisé la complication et assuré sa prise en charge, rechercher s'il existe aussi une addiction
- d. Comptabiliser précisément les quantités consommées
- e. Faire une action de prévention (par exemple RPIB)

# Online learning - Chapters

- Addiction: clarification & delimitation ([M. Auriacombe](#))
- Addiction: loss of control / epidemiology and behavior ([M. Auriacombe](#))
- Treatment of addiction ([J. Dubernet](#))
- Acute effects of substances ([M. Fatséas](#))
- Evaluation of addiction: the Addiction Severity Index ([F. Serre](#))

# Online evaluation

- **Quiz results**
  - multiple-choice questionnaires
  - questions randomly recombined
  - if failure, 45 minutes delay before retry  
= time to study the course / not force the Quiz
- **Online exam**
  - at the end of the semester

# Onsite workshop

- **Small groups** (  $\leq 20$  students)
- **Online quiz must be validated** to attend workshop session
  - ensure student has minimal knowledge
- Groups according **level of performance** at online exam
  - teachers can personalize teaching to match students performance and maximize the benefits of the onsite workshop

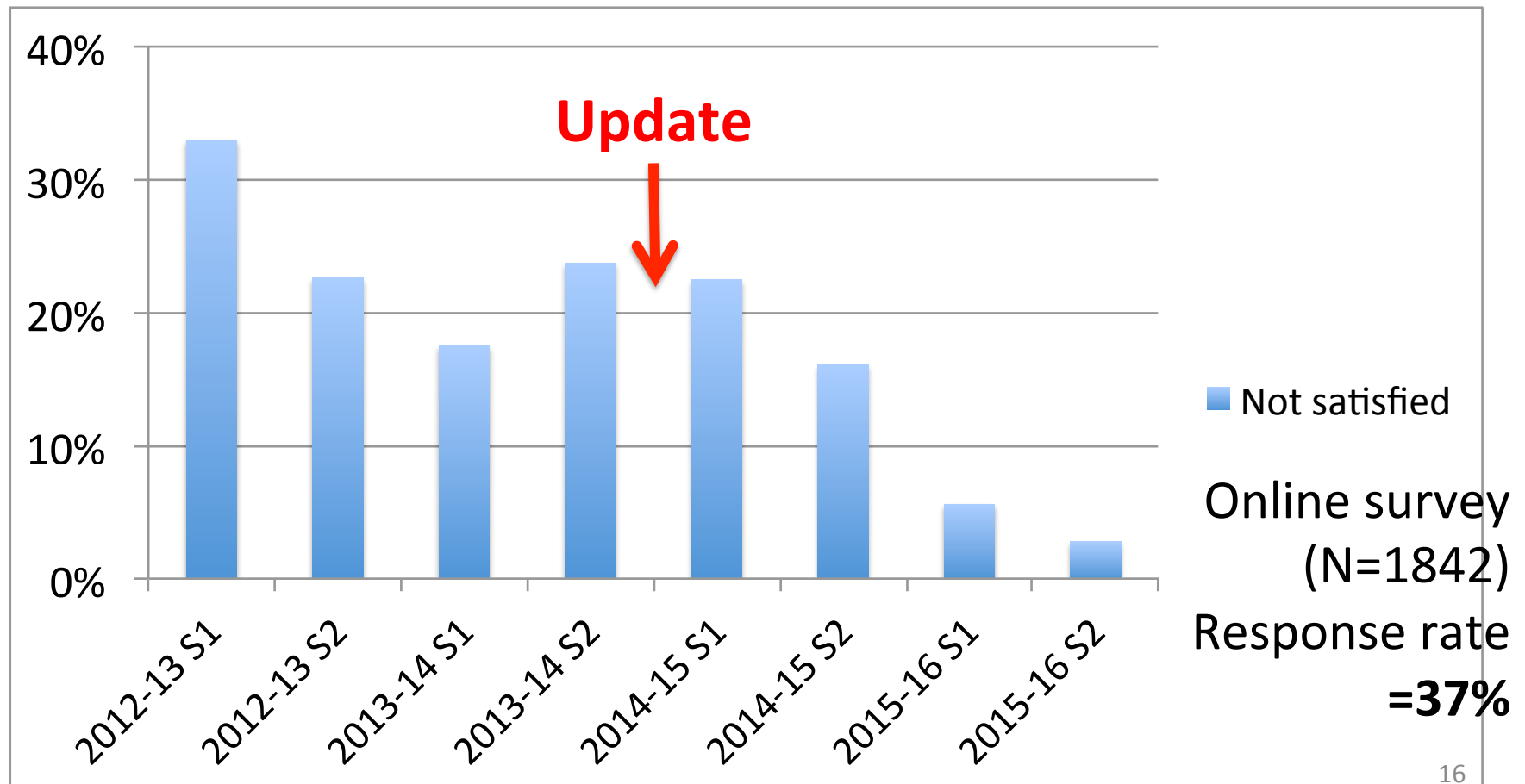
# Results – performance indicators

*Medical students (Master's degree)*

Year	Students	Online participation	Quiz validation	Quiz + Workshop
<b>2012-13</b>	<b>509</b>	<b>94.3%</b>	<b>92.9%</b>	<b>81.9%</b>
<b>2013-14</b>	<b>501</b>	<b>89.2%</b>	<b>85.8%</b>	<b>77.4%</b>
<b>2014-15</b>	<b>424</b>	<b>98.6%</b>	<b>96.2%</b>	<b>91.5%</b>
<b>2015-16</b>	<b>428</b>	<b>97,2%</b>	<b>95.6%</b>	<b>90.0%</b>
<b>TOTAL</b>	<b>1862</b>	<b>94.6%</b>	<b>92.4%</b>	<b>84.7%</b>

# Results – students feedbacks

## Not satisfied with e-learning (%/semester)





# Results – student feedbacks

## **Survey 2014-2016** (= *e-learning final version*)

- Online / response rate 44% (379 feedbacks)
- Global time: “**1h to 5h**” (71%)
- **Not** understanding how to validate: <3%
- **Difficulty** to use Moodle: <3%
- e-course **hard** to understand: <3%
- **Not** satisfied with e-learning: **10.5%**
- Would have **preferred** on-site lecture: **29.3%**
- Onsite workshop is **useful**: **82.1%**

# Results – teachers feedbacks

- « Students grouped by level facilitates student/teacher interactions: more questions from students across group levels »
- « Better knowledge of students failures helps personalize teaching »
- « It's nice to interact with more students compared to before »

# Conclusion: evidences of success

- ✓ **Production of quality teaching resources**
  - Regular updates and improvements
  - Use of Moodle features
- ✓ **Accessibility and flexibility of e-learning improved students commitment**
  - Quiz validation online
  - Workshop attendance (restricted to quiz validation)
- ✓ **On-site workshop was more efficient to deepen the course (teachers) and was useful (students)**
- ✓ **Overall satisfaction of students and teachers**

# References

FormaToile: <https://formatoile2.u-bordeaux.fr/>

(article in French) JM. Alexandre, M. Fatséas, J. Dubernet, J. Tanguy, M. Auriacombe. *Apport du e-learning à la formation clinique*. Santé Mentale, vol. 175, 2013

(Presentations) French Moodle Moot

2012 <http://moodlemoot2012.unimes.fr/>

2013 <http://moodlemoot2013.univ-bordeaux.fr/>

<https://moodle.org/> The Moodle logo consists of a black graduation cap icon above the word "moodle" in a bold, orange, lowercase sans-serif font.

# Contact

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