

# SEEKING OR NOT SEEKING HELP? USING AN ONLINE LEARNING ENVIRONMENT IN AN ADULT TRAINING

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# INTRODUCTION

- Objectives
  - xCALE (eXplaining Competency and Autonomy development in Learning Environments)
  - Research team: technology enhanced learning, artificial intelligence and educational sciences
  - To develop, test and evaluate a system offering personalized features on an online platform to support learning
- Background
  - Lifelong learning and e-learning
  - Self-regulated learning (Azevedo et Cromley, 2004 ; Cosnefroy, 2019 ; Greene, Moos et Azevedo, 2011)

# SELF-REGULATED LEARNING

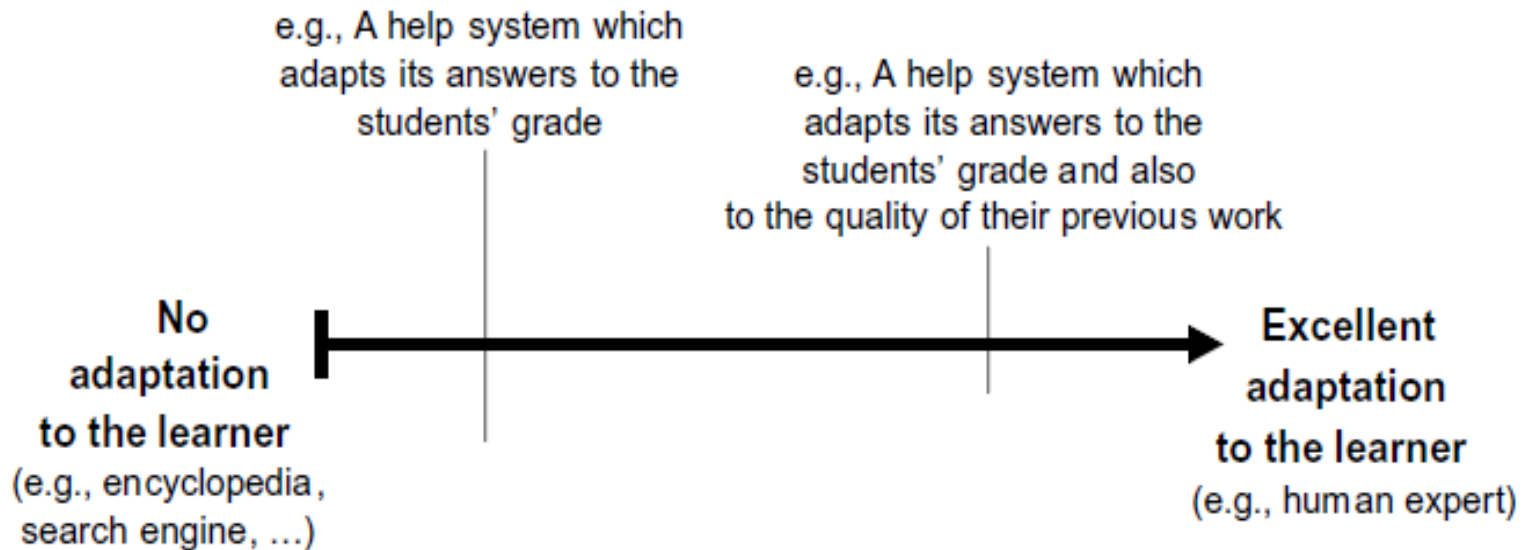
- Self regulated learning: “student can be described as self-regulated to the degree that they are metacognitively, motivationally, and behaviorally active participants in their own learning process” (Zimmerman, 1989, p. 329)
- Zimmerman and Pons (1986) 14 self-regulated learning strategies including:
  - Seeking information: “student-initiated efforts to secure further information from nonsocial sources when undertaking an assignment”
  - Seeking social assistance: “student-initiated efforts to solicit help from peers, teachers and adults”

# HELP SEEKING

- “help seeking can be defined as the process of seeking assistance from other individuals or other sources that facilitate accomplishing desired goals, which in an academic context may consist of completing assignments or satisfactory test performance” (Karabenick and Berger, 2013, p.238)
- the ability to implement strategies to overcome a difficulty and learn
- it is a proof that student can carry out a metacognitive reflection on the task to accomplish and knows what he can or cannot do alone

# HELP SEEKING

The help seeking continuum (Puustinen and Rouet, 2009)



# DESCRIPTION OF THE TRAINING

- Training for adults, professional insertion in the digital sector
- Created by a popular education association in partnership with an engineering school
- 60 trainees, 3 sites in a French Region
- Computer science and digital training
- Informal education activities, group workshops or independent tasks, trainers are always present
- For the research: algorithm, online learning environment called Algorea

# RESEARCH QUESTIONS

- Which helpers are mobilized when learners ask for help?
- Why do they choose online support or social assistance?
- On what do learners rely when choosing to seek for help?

# METHODOLOGY

- 23 interviews:
  - 8 women and 15 men, aged between 17 and 58 years old
  - Questions about: school career and career path, the reasons for their enrolment in the training, the training environment, the relationship with the others trainees and help seeking
  - The interviews were recorded and transcribed, thematic analysis (Blanchet et Gotman, 2007)
- 4 helpers identified:
  - Online learning environment: information about computer code and examples
  - Internet: search engine, discussion forum or tutorial
  - Trainers
  - Trainees: mutual assistance



# RESULTS

- **The online learning environment**
  - It is quite little known and little used
  - It is useful however the help is only information
- **The Internet**
  - There are many resources
  - Yet it is difficult to find reliable sources

# RESULTS

- **The trainers**

- They are available
- However some are unreachable

- **The trainees**

- Mutual assistance is important
- Yet sometimes it is complicated to help due to what they can do and what they can explain

# CONCLUSION

- Adaptability and availability of helpers (Puustinen et Rouet, 2009)
- Variety of help seeking practices
- Opportunities and constraints in the training
- Selection of helpers by trainees
- Trainees have rules of preference for choosing help depending on their needs and the training context

**THANK YOU FOR YOUR ATTENTION**

# BIBLIOGRAPHY

Azevedo, R. et Cromley, J. G. (2004). Does training on self-regulated learning facilitate students' learning with hypermedia?. *Journal of educational psychology*, 96(3), 523-535. DOI: 10.1037/0022-0663.96.3.523

Blanchet, A. et Gotman, A. (2007). *L'entretien*. Armand Colin.

Cosnefroy, L. (2011). *L'apprentissage autorégulé : entre cognition et motivation*. Presses universitaires de Grenoble.

Fatoux, C., Mottet, M. et Rouissi, S. (2018). État des connaissances sur la demande d'aide : quel apport pour la formation universitaire en ligne ? *Formation et profession*, 26(1), 43-54.

Greene, J., Moos, D. et Azevedo, R. (2011). Self-regulation of learning with computer-based learning environments. *New directions for teaching and learning*, 126, 107-115. <https://doi.org/10.1002/tl>

Jézégou, A. (2008). Apprentissage autodirigé et formation à distance. *Distances et savoirs*, 6(3), 343-364.

Karabenick, S. A. et Berger, J.-L. (2013). Help seeking as a self-regulated learning strategy. Dans H. Bembenuity, T. J. Cleary et A. Kitsantas (dir.), *Applications of self-regulated learning across diverse disciplines: A tribute to Barry J. Zimmerman* (p. 237-261). IAP Information Age Publishing.

Koc, S. et Liu, X. (2016). An Investigation of Graduate Students' Help-Seeking Experiences, Preferences and Attitudes in Online Learning. *Turkish Online Journal of Educational Technology-TOJET*, 15(3), 27-38.

Mahasneh, R. A., Sowan, A. K. et Nassar, Y. H. (2012). Academic help-seeking in online and face-to-face learning environments. *E-Learning and Digital Media*, 9(2), 196-210.

Puustinen, M., Bernicot, J. et Bert-Erboul, A. (2011). Written computer-mediated requests for help by French-speaking students: An analysis of their forms and functions. *Learning and Instruction*, 21(2), 281-289.

Puustinen, M. et Rouet, J. F. (2009). Learning with new technologies : Help seeking and information searching revisited. *Computers & Education*, 53(4), 1014-1019.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of educational psychology*, 81(3), 329-339.

Zimmerman, B. J. et Pons, M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American educational research journal*, 23(4), 614-628.

## Planter des fleurs

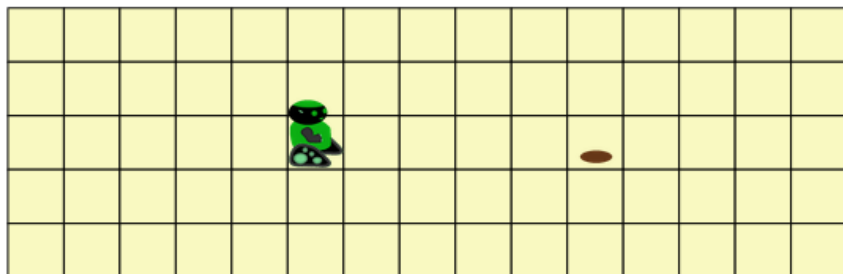
VERSION ☆

VERSION ☆☆☆

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VERSION ☆☆☆☆☆

Programmez le robot pour qu'il dépose une graine sur le tas de terre.



tourner à gauche

tourner à droite

avancer

semer une graine

répéter 10 fois

Programme du robot

8 blocs restants sur 8 autorisés.



# SELF-REGULATED LEARNING STRATEGIES (ZIMMERMAN ET PONS, 1986)

1. Self-evaluating
2. Organization and transforming
3. Goal setting and planning
4. Seeking information
5. Keeping records and monitoring
6. Environmental structuring
7. Self-consequating
8. Rehearsing and memorizing
- 9-11. Seeking social assistance
- 12-14. Reviewing records