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Early Findings on an Experiment in Distance Education with High School Students

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Presentation plan

- ❖ Context and research objectives
- ❖ Methodology
- ❖ Results and discussion



Context

- ❖ Distance education in the *Digital action plan for education and higher education* (Québec ministry of Education and Higher Education, 2018)
- ❖ Pilot projects in grades 10 and 11 (students aged 15 to 17 years old)
- ❖ Research funded by the Québec research fund - Society and culture



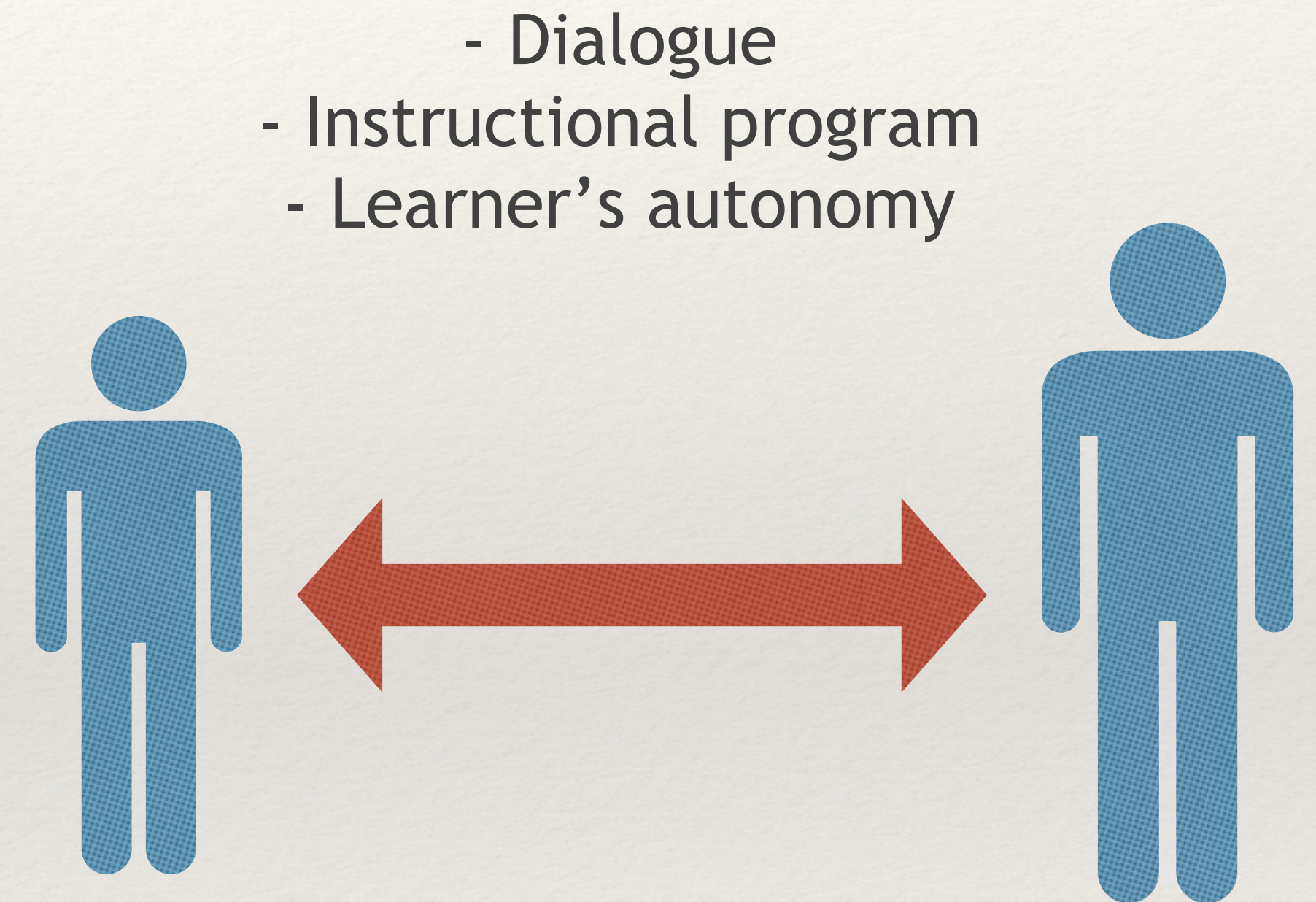
Objectives

- ❖ Objective : identify conditions that foster engagement and achievement in the context of distance education with high school students
- ❖ Achievement : instructional program (history course in the Moodle environment)
- ❖ Engagement : student support



Main concepts

- ❖ **Transactional Presence / distance** : « interplay among the environment, the individuals and the patterns of behavior in a situation » (Moore, 1993, p. 22)
- ❖ Ensuring a good (adapted to the context) transactional presence is an efficient way to boost motivation among students



Sample

- ❖ 5 schoolboards
- ❖ grades 9 to 11 (students 14 to 17 years old)
- ❖ 7 teachers
- ❖ Synchronous, asynchronous, modular or hybrid/ blended, depending on the class and year (Year 1 : 2020-2021)
- ❖ Courses :
 - ❖ *History of Québec and Canada*, grades 9 and 10
 - ❖ *Contemporary World*, grade 11.



Student profiles

- ❖ Students enrolled in intensive arts or sports programs
- ❖ Home schooling
- ❖ Students in distance education (DE) for health reasons during the pandemic
- ❖ Students in regular classes going on DE mode on and off during the pandemic



Source : Clker-Free-Vector-Images, Pixabay

Data collection and analysis

- ❖ Data collection :
 - ❖ Individual interviews with teachers (n=7)
 - ❖ Individual questionnaire to students (n=18)
 - ❖ Individual interviews with students (n=22)

- ❖ Data coding according to student support dimensions (Deschênes et Lebel, 1994) :
 - ❖ cognitive
 - ❖ motivational
 - ❖ socioaffective
 - ❖ methodological
 - ❖ metacognitive
 - ❖ technological

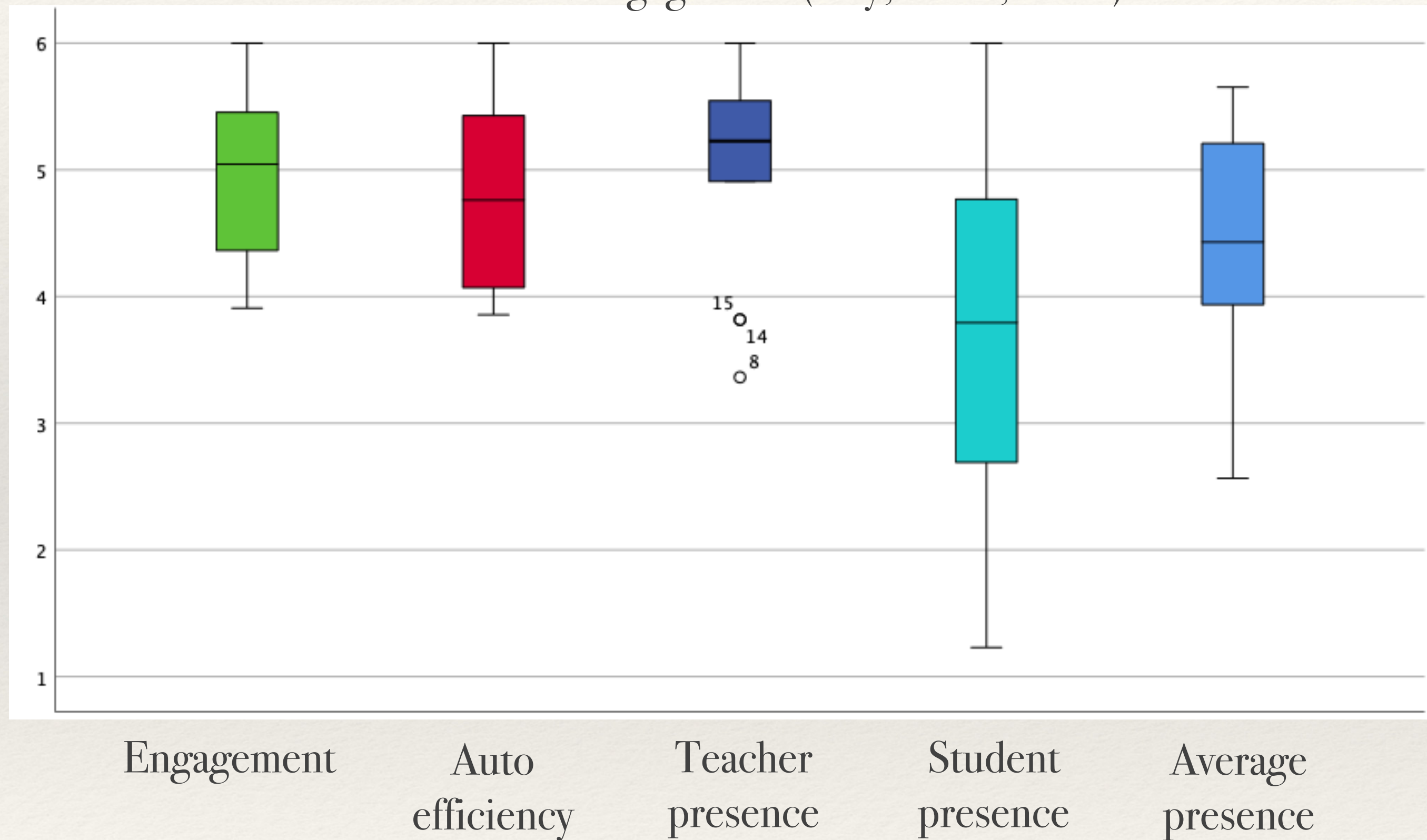


Source : Clker-Free-Vector-Images, Pixabay

Results

Motivation and engagement (student questionnaires)

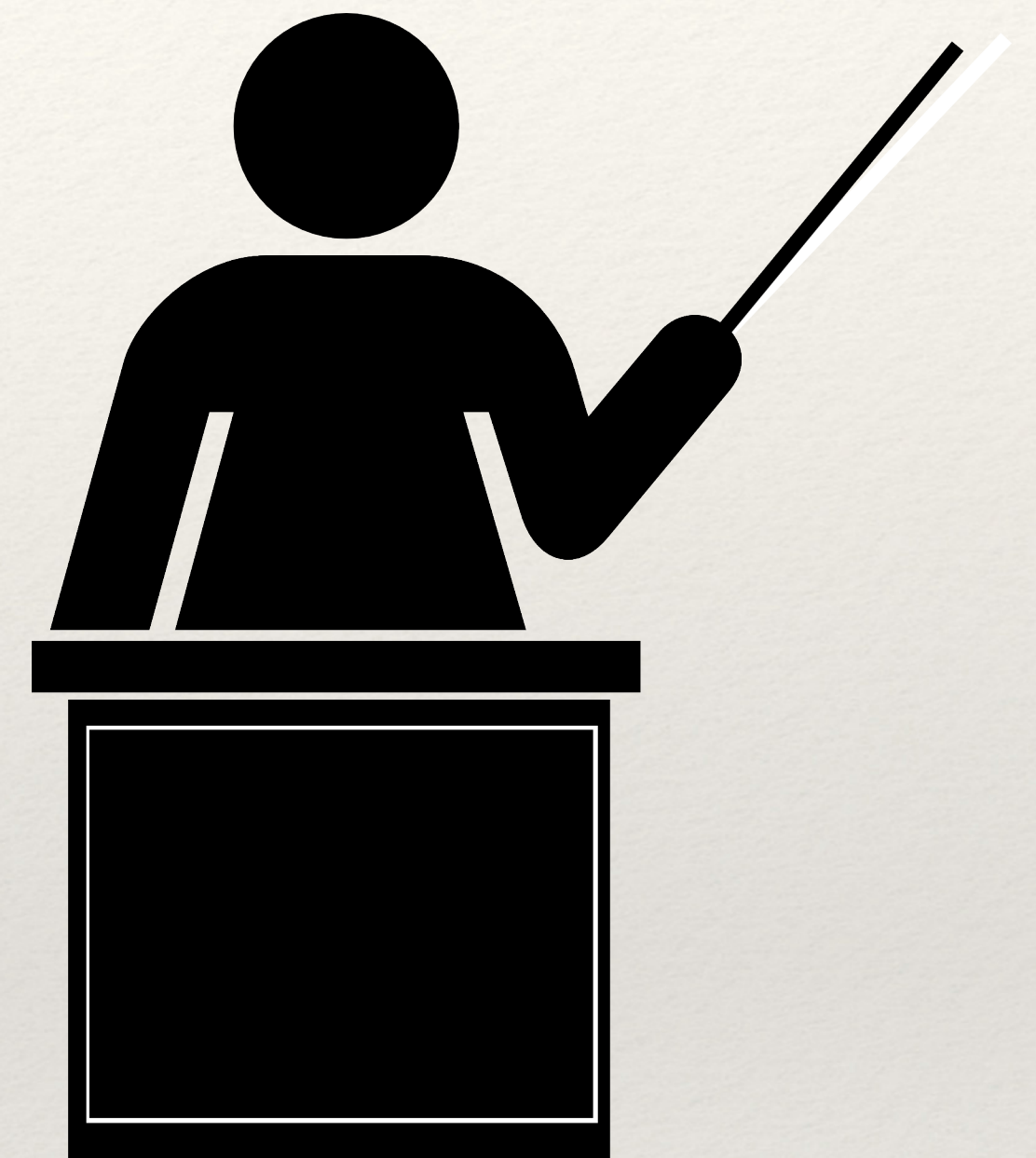
Motivation and engagement (may, 2021, n=18)



- Questionnaire distributed during year 1
- Many students in DE against their will
- Teacher presence does not meet the needs of a minority of students, most say the teacher's presence is adequate

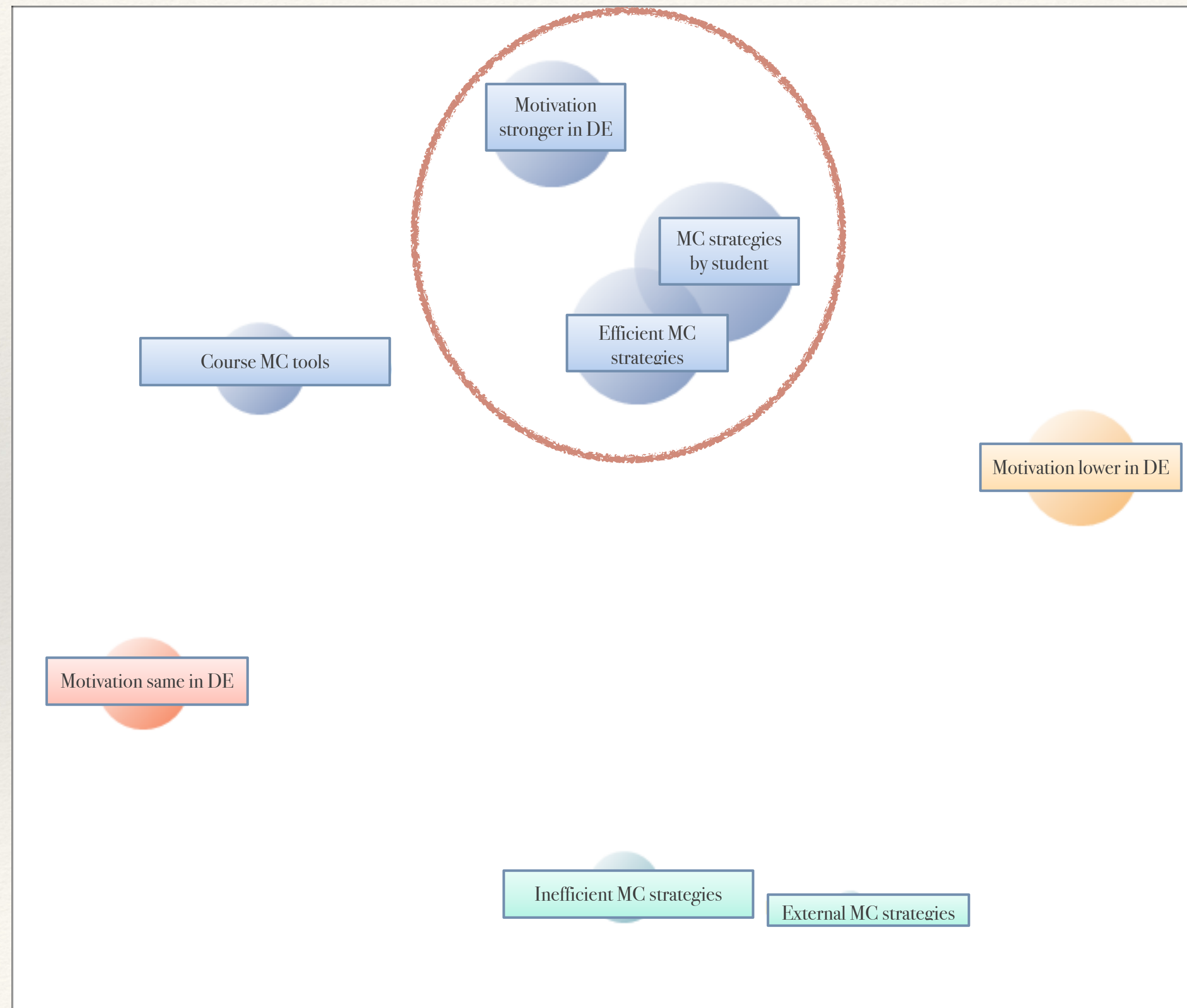
Student support (teacher interviews)

- Great diversity in contexts and in support strategies
- Teachers feel their methods to engage students are not efficient
- Many actions oriented on the cognitive dimension, but most difficulties are associated with the motivational and socioaffective dimensions
- The need to adopt proactive instead of reactive strategies



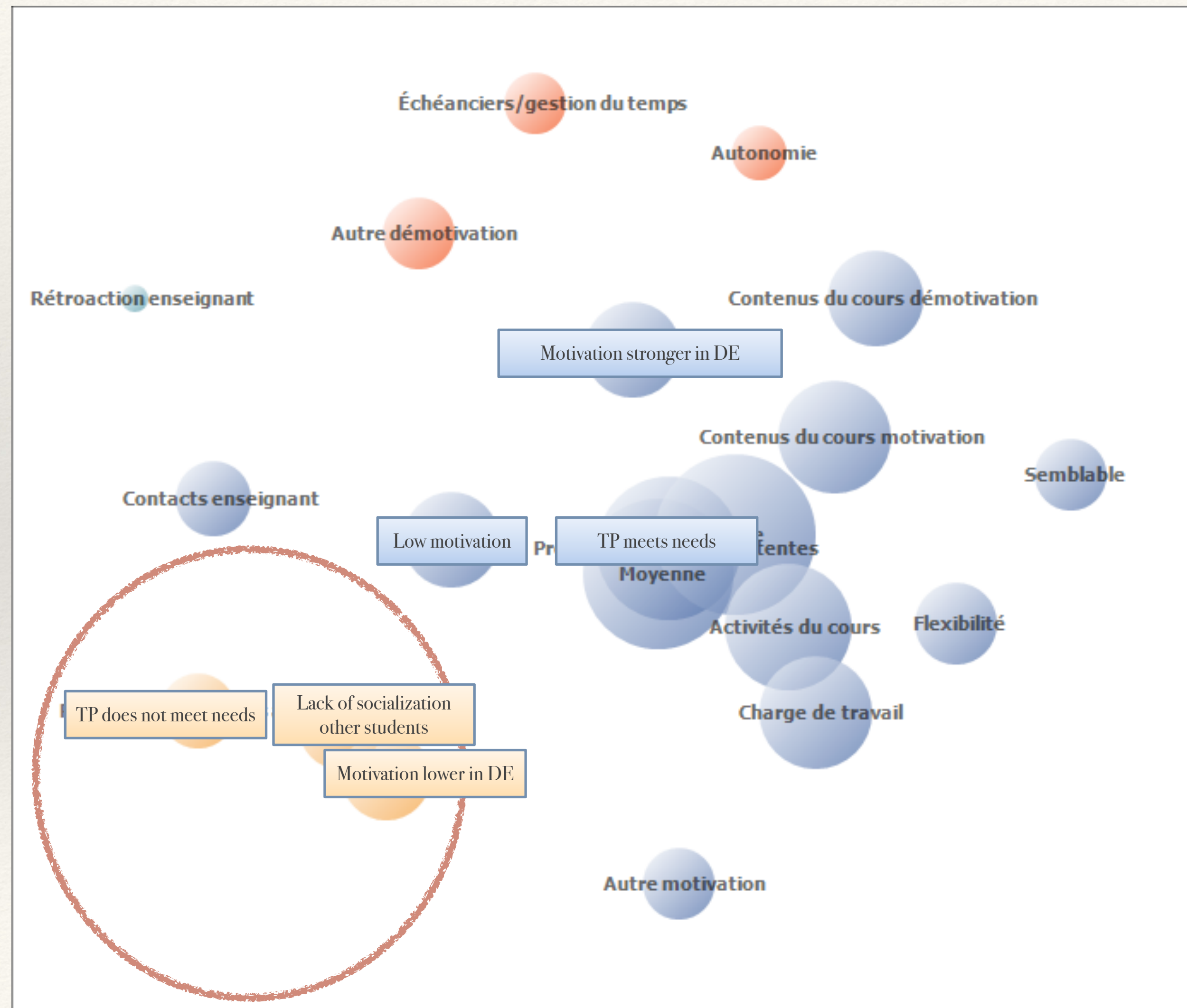
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Students' motivation and engagement (student interviews)



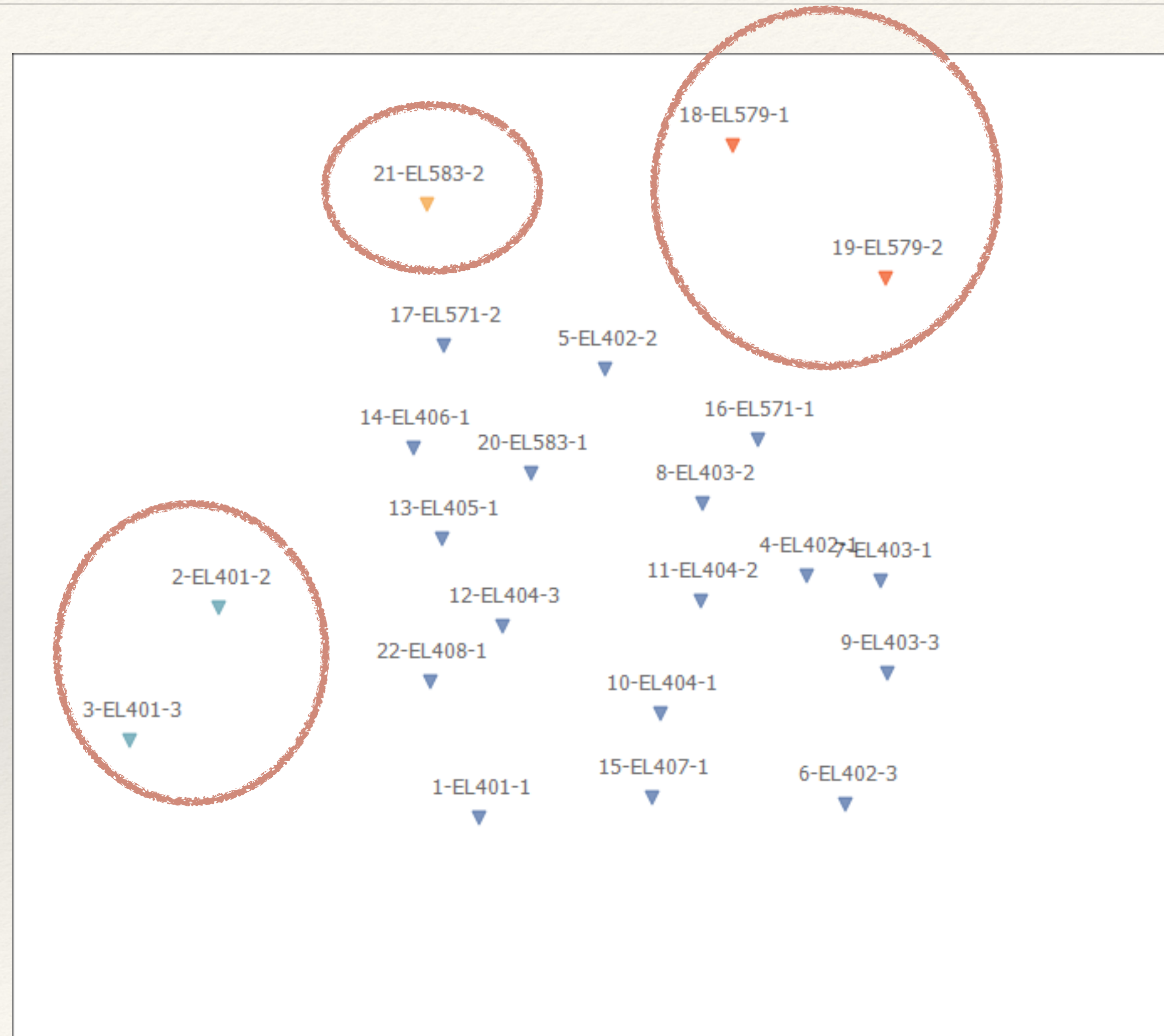
Students report stronger motivation in DE when they develop and use efficient metacognitive (MC) strategies

Students' motivation and engagement (student interviews)



Student motivation affected by lack of socialization with other students and a teacher presence (TP) that does not meet their needs

Students' motivation and engagement (student interviews)

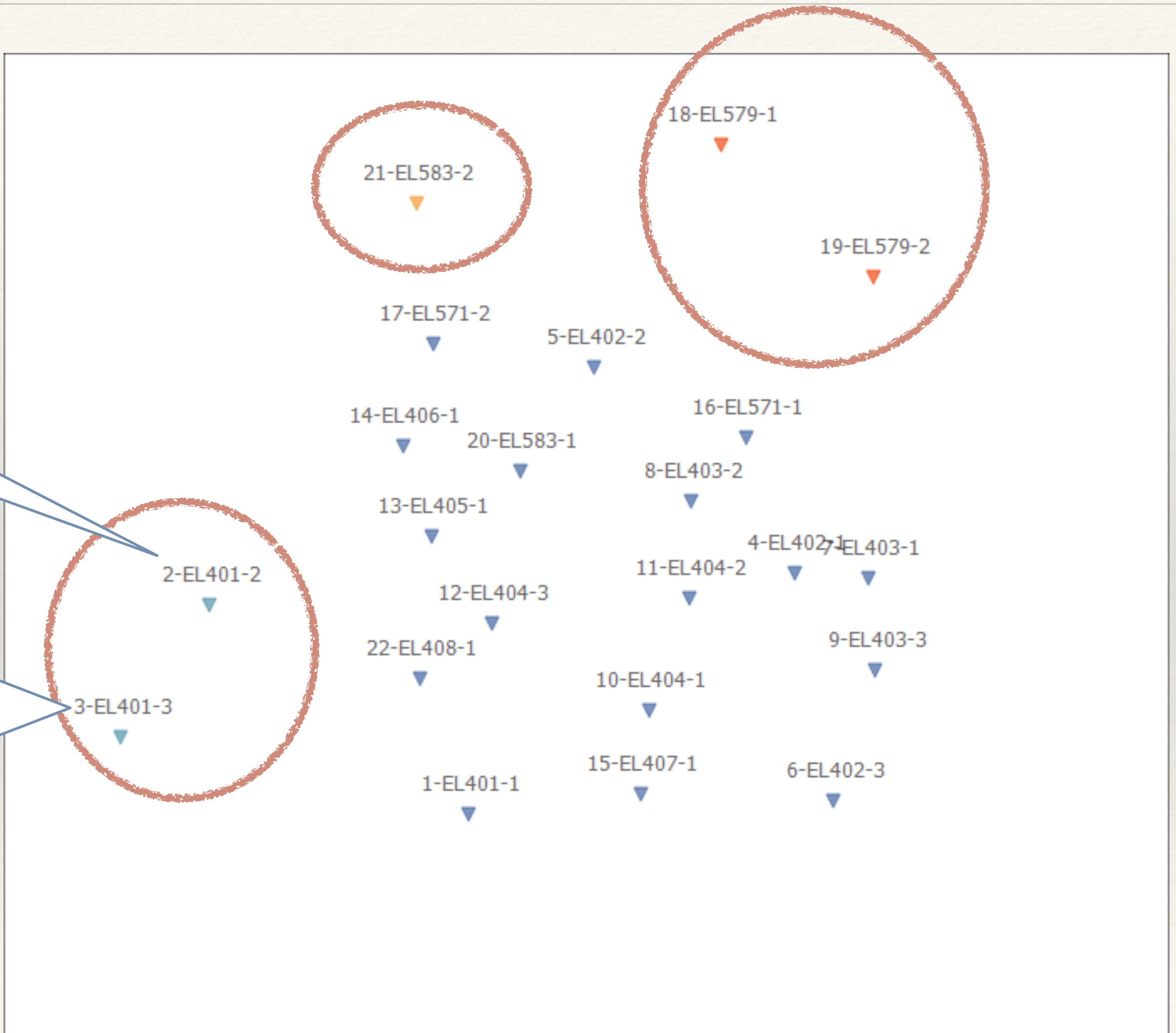


Students' motivation and engagement (student interviews)

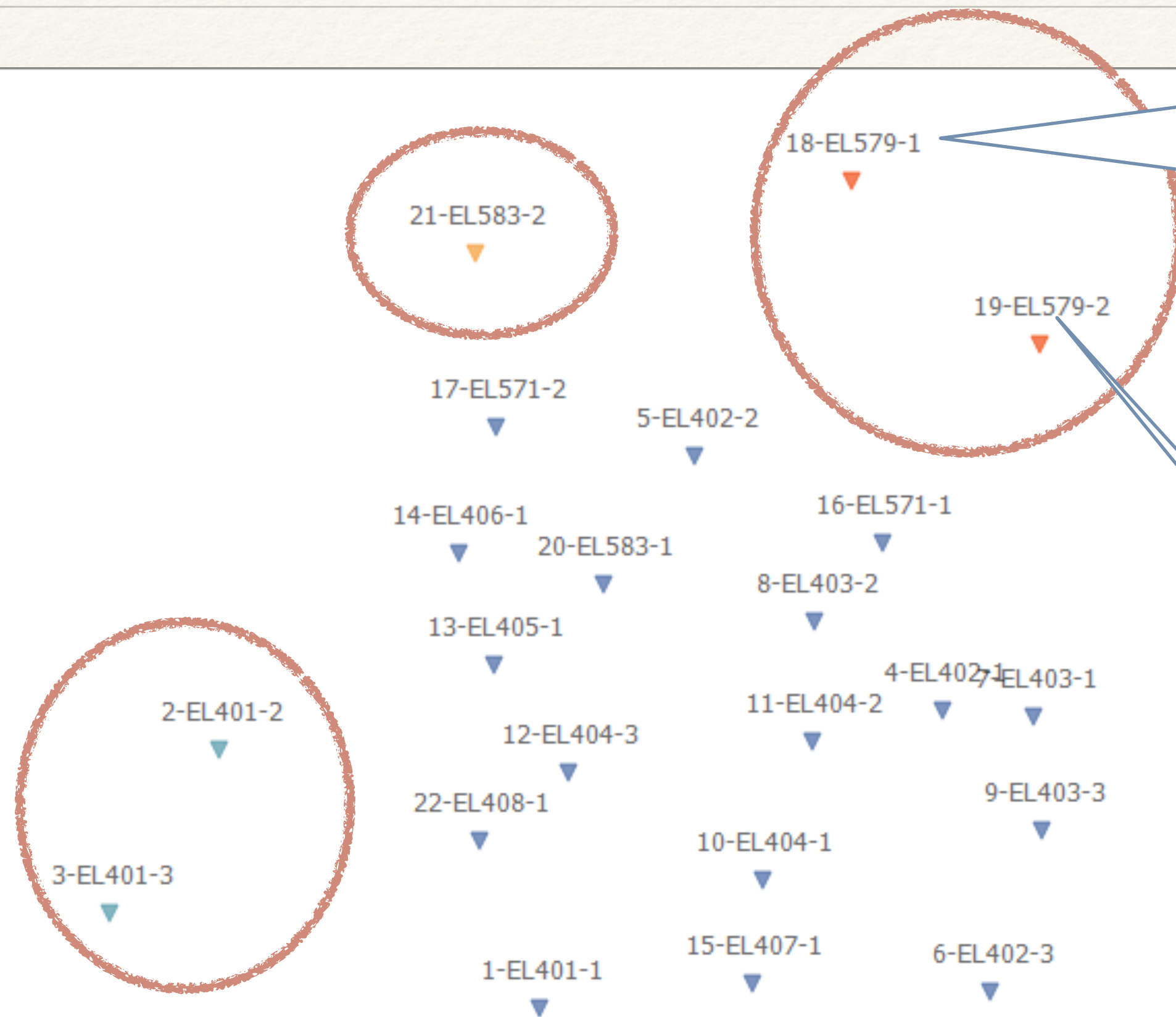
« We don't talk to anybody in all the classes. You must write an email to the teacher. This method might work for people who are very busy, but I think we could have better contacts than that »

[year 1, asynchronous context]

« In this schoolboard, all the classes are like that, you take the course on your own. There are no Zoom meetings. ALL classes are like that, even the history course, so it's not very motivating »



Students' motivation and engagement (student interviews)



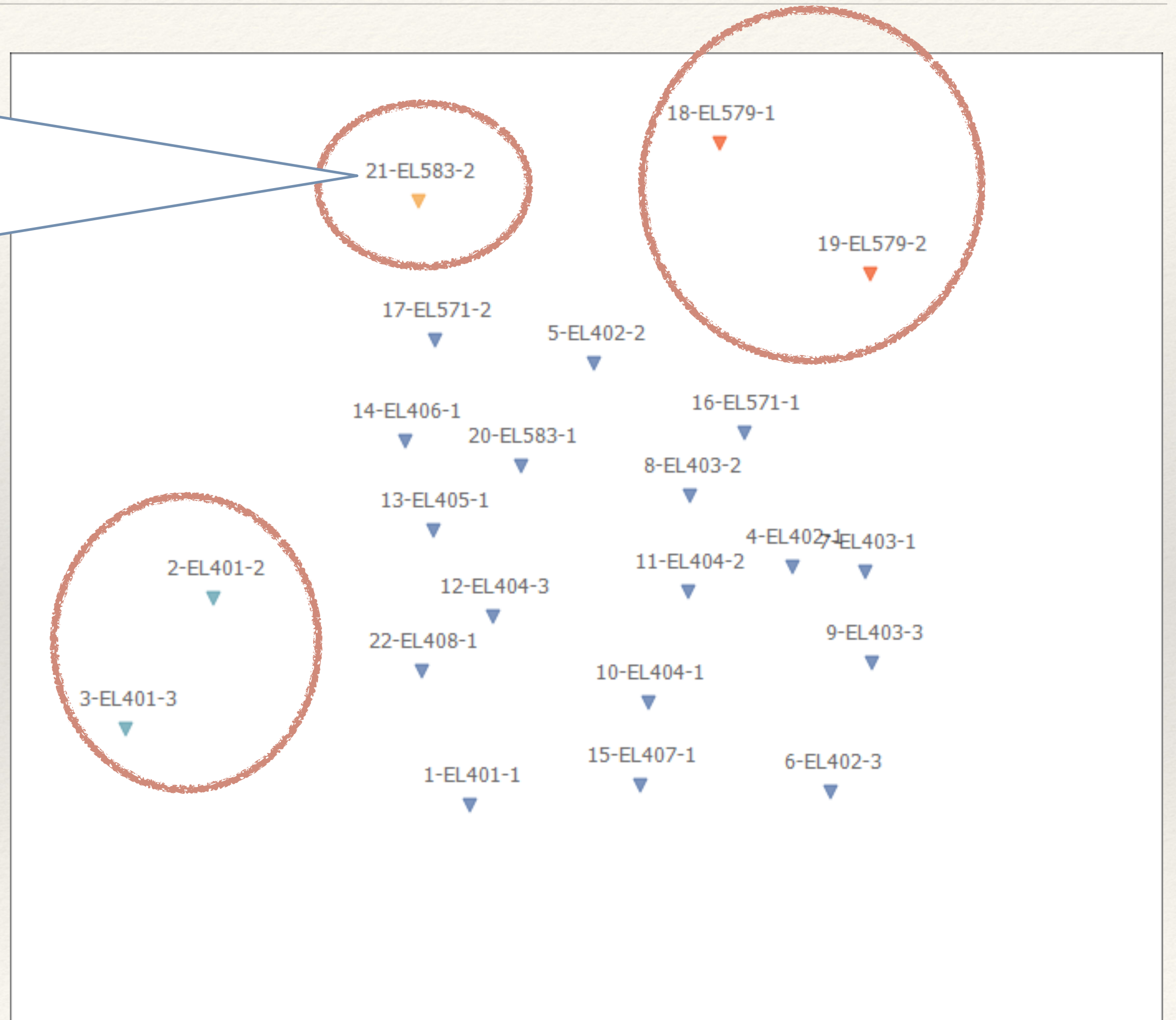
« Of course it can't hurt (about online exercises), but for people like me who don't have a computer..., and we were told that these exercises counted for our marks, you don't know what to do. I had to ask a friend to take pictures of the exercises and send them to me so that I could rewrite everything on paper »
[year 2, hybrid/blended context]

[Talking about a prolonged period of absence due to a COVID infection] « During that time, Teams worked on and off so did the online textbook. So I had to find ways to keep up... »

Students' motivation and engagement (student interviews)

« As far as online activities go, I don't find them useful and don't like them. I hate doing online activities. I think that adding these activities is just adding more homework, but different from homework »

[year 2, hybrid/blended context]



Conclusion

Discussion and work to come

- ❖ Distance education meets the needs of the majority of students we met;
- ❖ A minority of students doesn't feel at ease in that format (feel isolated, don't have proper access to tools, feel a overbearing workload);
- ❖ Teacher presence seems to positively influence the motivational and cognitive dimensions;
- ❖ Student autonomy (seen through the metacognitive dimension) positively affects motivation.



Source : [kreatikar, Pixabay](#)

Discussion and work to come

- ❖ From year 2, the students enrolled in asynchronous courses are doing the equivalent of home schooling;
- ❖ The pandemic accelerated the rollout of numeric tools in the hybrid context (Teams and the online textbook) without much planning;
- ❖ The future of distance education in Québec at the secondary level is unclear.



Source : [kreatikar, Pixabay](#)

Références

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