

Reflecting on Self-Study Support in the "Cyber Self-Study Room" from the Perspective of the "ID Seven Principles"

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Abstract : The "Cyber Self-Study Room" is a self-study support system where learners recruit participants via Slack and engage in self-study sessions synchronized by a shared timer on web conferencing tools. This study utilizes the "ID Seven Principles" as a conceptual framework to evaluate the system's design and effectiveness. Results show alignment in fostering a learning community and assuming use by self-directed learners. The teacher-less structure represents a unique functional characteristic.

Keywords: Cyber Self-Study Room, ID Seven Principles, Self-Study, Co-presence, Pomodoro Technique

1. Introduction

Learning is increasingly viewed as a necessity for lifelong knowledge updates (Šimenc and Kodolja 2016). The "Cyber Self-Study Room" has been operational since 2019 to provide a continuous learning environment (Takahashi et al., 2021). The system applies the Pomodoro Technique (Cirillo, 2018) and co-presence (Biocca et al., 2003; Bulu, 2012) to support diverse learners through repeated study and break cycles. This paper reflects on the system's functions through the "ID Seven Principles" (Suzuki, 2023) to identify challenges and future improvements.

2. Overview of the "Cyber Self-Study Room"

Figure 1 shows the flow from entering to exiting the "Cyber Self-Study Room," and its main features are listed below.

- Organizers recruit self-study learners through Slack.
- Learners will log in to the web conferencing tool provided by the organizer.
- Learners use a shared timer set to a "55-minute study / 5-minute break" cycle.
- The core mechanism creates a co-presence through webcams and brief breaks.
- Learners are free to enter or leave at any time.

3. Application of the "ID Seven Principles"

Compiled by Katsuaki Suzuki, the "ID Seven Principles" summarizes the core goals of instructional design. These seven items serve as a checklist for reflecting on ID practices. As shown in Table 1, we applied the "ID Seven Principles" to the evaluation of the "Cyber Self-Study Room".

4. Preliminary evidence for the checks in Table 1

Evaluation of the "Cyber Self-Study Room" based on the "ID Seven Principles" as shown in Figure 1: Although these are preliminary results, we present evidence derived from a survey of self-learners who used this system. The survey results presented below were calculated as averages for $n = 7-10$ based on a 4-point Likert scale (1-4). The following shows the results for each of the "ID Seven Principles."

1. The results of the survey asking, "How was your self-study experience using the Cyber Self-Study Room?" scored an average of 3.3/4.0, indicating that users want to use this system.
2. The survey results showing that "concentration was maintained by the operation of the Pomodoro timer (by the countdown being displayed)" yielded a high average of 3.2/4.0; therefore, we consider the system to contain elements of SRL.
3. Not Aligned.
4. "I enjoyed the sharing time" was a highly rated response in the survey, averaging 2.8/4.0. This suggests that the sharing time has formed a community, and its existence plays a role in sustaining each individual's intrinsic motivation.
5. Based on the high survey scores—average 3.0/4.0 for "Being able to see other learners online fostered a peer sense of community" and average 3.1/4.0 for "Sharing learning experiences fostered a peer sense of community"—it appears that the Cyber Self-Study Room provides a space for forming peer-based learning communities.
6. The survey results for "reviewing learning goals (posted on Slack) a few days later" averaged 2.7/4.0. To further improve these results, the web application for this system—which makes it easy to review learning logs such as goals—will be developed.
7. Specific qualifications and degrees that self-learners aim for include master's and doctoral degrees, as well as certifications in human resources and labor relations.

5. Conclusion

Based on a preliminary evaluation of the "Cyber Self-Study Room" according to the "ID Seven Principles," we concluded that it aligns with these principles in terms of fostering peer-learning communities and facilitating self-directed learners. Furthermore, since this system operates without a teacher and is designed for self-directed learners who select and manage their own goals and materials, it does not comply with Principle 3; however, maintaining a policy of not assuming that role is a defining characteristic of this system.

References

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Figure 1. Process Flow: "Cyber Self-Study Room" (Entry to Exit)

Table 1. The "ID Seven Principles" and the "Cyber Self-Study Room" checked by it

"ID Seven Principles"	check	Evaluation of the "Cyber Self-Study Room"
1. Do not offer an education you wouldn't want to receive yourself. We must stop reproducing bad educational practices you would avoid yourself.	○	Do not offer self-study environments that you wouldn't want to use yourself. Since there were no self-study environments that we wanted to use, we developed our own.
2. Avoid simply producing "cookie-cutter" students (a rigid application of SRL aiming at the same goal for everyone). Instead, help them gradually add their own uniqueness, not only in approaches but also in goal setting, progressing from Self-Regulated Learning (SRL) to Self-Directed Learning (SDL).	△	Users of the "Cyber Self-Study Room" must be SDLs; we do not anticipate a progression from SRL to SDL. However, we consider time management using a timer to contain elements of SRL.
3. Aim for education that is memorable, not that merely makes students memorize. Structure learning around challenging endeavors to increase the likelihood of "unforgettable encounters" (based on the Quality of Learning Experience Model).	✕	Since the "Cyber Self-Study Room" is a self-study environment without a teacher, it is unrelated to this item. Therefore, it is obviously "inappropriate." (Takahashi et al., 2025).
4. Strive to help students experience the joy of learning, because learning is inherently enjoyable. When students can genuinely feel their own growth, external "motivation" becomes unnecessary.	○	Since we have a community where we learn from one another and support each other's growth, external "motivation" becomes unnecessary.
5. Choose methods that foster a community of peers who learn from and with each other. By learning together, we can go much farther.	◎	Sharing webcams, syncing learning paces and break-time encouragement enhance co-presence, fostering a positive learning community. By learning together, we can go much farther.
6. Teach students how to advance step-by-step, taking time to confirm and savor their growth. Assessment is the art of learning from failure; it is also the practice of appreciating achievement.	○	This web app allows learners to track their progress and assignments, facilitating review of their own development step-by-step. Such reflections also involve recognition of their own failures.
7. Encourage students to aim to develop their unique strengths and become people who can contribute more to others. Because that becomes their purpose in life (Adlerian Psychology).	△	Based on interviews, many self-learners pursue their studies with a clear goal, such as achieving qualifications or degrees to contribute more to society. While this is not a requirement.

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