

Self-Regulation Strategies

In the context of online education, self-regulation refers to students' ability to "manage their own learning processes" in an online learning environment without in-person teacher support.¹ Students should set personal goals at the outset of an online learning experience and review the progress made toward these goals at the end of the experience.²

| CATEGORY | EXAMPLES |
|------------------------|---|
| Personal Regulation | <ul style="list-style-type: none"> Organizing and Transforming Goal Setting and Planning Rehearsing and Memorizing |
| Behavioral Functioning | <ul style="list-style-type: none"> Self-Evaluation and Self-Consequences Keeping Records and Monitoring |
| Learning Environment | <ul style="list-style-type: none"> Environmental Structuring Seeking Information Reviewing Seeking Assistance |

Source: *European Journal of Contemporary Education*³

Students who succeed in online learning environments use the self-regulation strategies summarized in the figure on the left to support independent learning.⁴ In particular, research finds a connection between a student's ability to apply metacognitive strategies to online learning and success in online courses.⁵ Teachers should create online learning environments that encourage students to use self-regulation strategies.⁶

Research examining successful online charter schools finds that students in an online learning environment benefit from intensive teacher support to develop self-regulation skills and ensure accountability for online learning.⁷ Teachers should provide the following online learning supports:

- Direct instruction in study habits and effective online learning strategies,⁸
- Clearly communicated expectations for engagement and participation,⁹ and
- Explicit instruction in metacognitive strategies and instructional scaffolds to support the use of these strategies,¹⁰

Emotional Self-Regulation

Emotional regulation is a core social-emotional learning (SEL) competency that allows students to prevent, avoid, reduce, initiate, sustain, and enhance their experiences with specific emotions to prevent inappropriate emotional reactions that hinder learning.¹¹ Because emotion plays an essential role in learning, teachers in an online environment need to provide support for students' emotional self-regulation.¹²

Additional Resource

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has developed a [compendium](#) of resources focused specifically on providing social and emotional support to students during the COVID-19 outbreak.

Teachers can support emotional self-regulation through coaching and scaffolding that supports students in identifying appropriate ways to respond to emotions. For example, teachers can coach students to use the reflective questions shown opposite when deciding how to react to their emotions.¹⁴

What are my options?

What feels right in this situation?

How will my reaction affect me and others?

What is a productive reaction?

Source: Decision Education Foundation¹³

Peer Collaboration and Supports

Schools can use collaborative online learning activities to promote self-regulation and engagement in online coursework.¹⁵ Online courses should include structures and policies that require students to collaborate with each other and with teachers.¹⁶ Teachers can use the strategies listed in the figure below to build a sense of community and encourage collaboration in an online learning environment. Hanover Research's toolkit titled [Planning and Delivering Online Instruction](#)

[for K-12 Students During COVID-19 School Closures](#) includes links to technology resources and platforms teachers can use to facilitate collaboration among students in an online learning environment.

Community-Building Strategies for Online Learning

| STRATEGY | EXAMPLES |
|--------------------------|---|
| Affective Association | <ul style="list-style-type: none"> Encourage use of bold, underline, and emoticons in appropriate ways Use announcements to praise and motivate students Build in audio and video where possible |
| Community Cohesion | <ul style="list-style-type: none"> Encourage positive social interaction through social spaces Focus early on students and instructors getting to know each other |
| Interaction Intensity | <ul style="list-style-type: none"> Seek out websites, applications, blogs, and other online tools to support instruction Find social tools that make it easier for you to communicate with your students |
| Knowledge and Experience | <ul style="list-style-type: none"> Design assignments that ask students to make connections with other aspects of their lives Model ways to engage with the content of the course through a variety of online tools |
| Instructor Involvement | <ul style="list-style-type: none"> Create synthesis responses making explicit connections to student posts Note common areas for improvement and tailor individual feedback based on these commonalities |

Source: *Learning & Leading with Technology*¹⁷

Teachers can promote collaboration by setting up online discussion boards where students can reflect on their learning and receive feedback from peers and teachers.¹⁸ Participating in discussion boards ensures that students actively engage with course content rather than passively observing instruction.¹⁹ Teachers should take care to provide support for effective collaboration, as ineffective collaboration in an online environment can increase frustration. Teachers should provide explicit instruction on both the social skills needed for effective collaboration in general and expectations for specific collaborative activities at the outset of the learning experiences.²⁰

Collaborative activities may be particularly important for schools making unplanned transitions to online learning as a result of the COVID-19 outbreak. According to the [California Department of Education \(CDE\)](#), collaborative work in small groups can help students maintain relationships with classmates during remote learning. The CDE recommends that teachers assign students to provide feedback on one another's work in small groups to support continuity and ensure equitable participation in learning activities.²¹ Peer review strategies in which students review and provide feedback on one another's work helps ensure that students engage constructively with online learning assignments. Teachers should provide incentives, such as online tokens or points, to encourage students to provide peer feedback.²²

Motivation

Students must be motivated to persist in online learning to apply self-regulation skills.²⁴ Teachers can increase motivation by connecting instruction to students' interests.²⁵ Teachers can also use the strategies listed in the figure to the right to monitor students' performance in online courses and provide motivation as needed.

Checking on progress and reminding students to keep working and stay on schedule

Encouraging students to keep working when feeling unsuccessful

Encouraging and praising students for staying engaged in the course

Regularly checking student grades and providing praise and encouragement as needed

Source: *Journal of Online Learning Research*²³

The American Psychological Association (APA) recommends that teachers provide students with an age-appropriate degree of choice in learning activities to support motivation and develop self-regulation skills. Research finds that choice in learning activities develops intrinsic motivation and

self-efficacy in students across grade levels.²⁶ Hanover Research's [Virtual Instruction and Personalized Learning Infobrief](#) provides additional information on strategies to promote student choice in an online learning environment. In addition to providing choice, the APA recommends the following strategies to support motivation in both online and in-person learning environments:²⁷

- Set clear performance standards from the start,
- Help students develop a sense of ownership over the learning process,
- Provide feedback to students, and
- Encourage students to assess their own learning progress.

**Responsive
Effective
Positive
Learning
You**

Provide a timely response to student questions
Offer specific comments aligned to the assignment's objectives
Use words that give off a positive connotation
Include suggestions for how the assignment can be improved
Make it personal and not just a standard response

Source: Michigan Virtual Learning Research Institute²⁸

As seen in the table to the left, the Michigan Virtual Learning Research Institute's (MVLRI) [Teacher Guide to Online Learning](#)

recommends that teachers use assessment and feedback to motivate students in online courses.²⁹ Feedback should address individual students' performance over time, rather than comparing students to one another to promote mastery goal setting rather than performance goal setting. Focusing on mastery rather than performance goals improves students' emotional well-being and enjoyment of learning and reduces boredom and anger.³⁰ Feedback should also reflect authentic assessment strategies to promote student engagement. For example, teachers can have students deliver online presentations to demonstrate their learning to the teacher and their peers.³¹ Depending on the availability of technology resources, teachers can also assign students to produce videos demonstrating their knowledge of course content.³²

In addition to feedback on specific assignments and learning activities, teachers can motivate students through individual encouragement and redirection. Teachers can encourage students who are performing strongly through individual phone calls or emails or by highlighting quality student work in a weekly announcement to the class. If students are failing to make progress or engage with the online course, teachers should reach out to individual students to redirect their work.³³

Endnotes

- ¹ Lock, J.V., S.E. Eaton, and E. Kessy. "Fostering Self-Regulation in Online Learning in K-12 Education." *Northwest Journal of Teacher Education*, 12:2, October 2017. p. 1.
<https://pdfs.semanticscholar.org/0fa2/4dbfd21961f0a9f2b68398d5b1e6d393021d.pdf>
- ² Chumbley, S. et al. "A Measure of Self-Regulated Learning in Online Agriculture Courses." *Journal of Agricultural Education*, 59:1, 2018. p. 165.
https://eric.ed.gov/?q=online+learning+secondary&ft=on&ff1=dtysince_2016&ff2=eduSecondary+Education&id=EJ1176251
- ³ Chart contents adapted from; Delen, E. and J. Liew. "The Use of Interactive Environments to Promote Self-Regulation in Online Learning: A Literature Review." *European Journal of Contemporary Education*, 15:1, 2016. pp. 27-28.
- ⁴ Marsteller, R. and A. Bodzin. "Examining the Implementation of an Online Curriculum Designed with the Person Theoretical Framework on Student's Evidentiary Reasoning and Self-Regulated Learning." *Electronic Journal of Science Education*, 23:3, 2019. p. 75.
- ⁵ Yen, A.M.N.L. "The Influence of Self-Regulation Processes on Metacognition in a Virtual Learning Environment." *Educational Studies*, 46:1, January 2, 2020. pp. 2-3.
- ⁶ Delen, E. and J. Liew. "The Use of Interactive Environments to Promote Self-Regulation in Online Learning: A Literature Review." *European Journal of Contemporary Education*, 15:1, 2016. p. 29. <https://eric.ed.gov/?q=self-regulation+online+learning&ft=on&id=EJ1095976>
- ⁷ Doyle, D. and I. Hernandez-Cruz. "Meeting the Potential of a Virtual Education: Lessons from Operators Making Online Schooling Work." Public Impact, 2019. pp. 13-14.
https://eric.ed.gov/?q=online+learning+elementary&ft=on&ff1=dtysince_2016&pg=4&id=ED598612
- ⁸ "Administrator Guide to Online Learning." Michigan Virtual Learning Research Institute.
<https://michiganvirtual.org/resources/guides/admin-guide/>
- ⁹ Ibid.
- ¹⁰ Yen, Op. cit., p. 11.
- ¹¹ Brackett, M.A. and S.E. Rivers. "Transforming Students' Lives with Social and Emotional Learning." Yale Center for Emotional Intelligence, Yale University. p. 11. <http://ei.yale.edu/wp-content/uploads/2013/09/Transforming-Students%E2%80%99Lives-with-Social-and-Emotional-Learning.pdf>
- ¹² Cleveland-Innes, M. and P. Campbell. "Emotional Presence, Learning, and the Online Learning Environment." *The International Review of Research in Open and Distributed Learning*, 13:4, 2012. pp. 272-273.
- ¹³ Chart contents adapted from: Keelin, T., P. Schoemaker, and C. Spetzler. "Decision Quality: The Fundamentals of Making Good Decisions." Decision Education Foundation, 2009. p. 5.
http://docs.wixstatic.com/ugd/d3c97e_9452fec9f54e674f5c4e6f0dcd5edc63.pdf
- ¹⁴ "How Can We Help Kids with Self-Regulation?" Child Mind Institute. <https://childmind.org/article/can-help-kids-self-regulation/>
- ¹⁵ Swetlik, Z. et al. "Virtual Learning Strategies for Lost Instructional Time." *The CTE Journal*, 3:2, 2015. p. 16.
<https://www.thectejournal.com/uploads/1/0/6/8/10686931/swetlik.pdf>
- ¹⁶ Oviatt, D.R. et al. "Online Student Perceptions of the Need for a Proximate Community of Engagement at an Independent Study Program." *Journal of Online Learning Research*, 2:4, 2016. p. 338.
https://eric.ed.gov/?q=online+course+k-12&ft=on&ff1=dtysince_2016&id=EJ1148598
- ¹⁷ Chart contents taken verbatim from: Dikkers, A.G., A. Whiteside, and S. Lewis. "Get Present." *Learning & Leading with Technology*, 40:2, September 2012. p. 23. Accessed via EBSCOhost
- ¹⁸ "Teacher Guide to Online Learning." Michigan Virtual Learning Research Institute, Fall 2017. p. 23.
<https://michiganvirtual.org/wp-content/uploads/2017/08/Teachers-Guide.pdf>
- ¹⁹ Ransdell, S., J. Borrer, and H.F. Su. "Users Not Watchers." *Distance Learning*, 15:2, April 2018. pp. 35-36. Accessed via EBSCOhost
- ²⁰ Pentaraki, A. and G.J. Burkholder. "Emerging Evidence Regarding the Roles of Emotional, Behavioural, and Cognitive Aspects of Student Engagement in the Online Classroom." *European Journal of Open, Distance and E-Learning*, 20:1, 2017. p. 12. <https://www.degruyter.com/downloadpdf/j/eurodl.2017.20.issue-1/eurodl-2017-0001/eurodl-2017-0001.pdf>
- ²¹ "Lessons from the Field: Remote Learning Guidance." Health Services and School Nursing, California Department of Education. <https://www.cde.ca.gov/ls/he/hn/appendix2.asp>
- ²² Ruane, R. and V.J. Lee. "Analysis of Discussion Board Interaction in an Online Peer Mentoring Site." *Online Learning*, 20:4, December 2016. p. 69.
https://eric.ed.gov/?q=peer+support+online+learning&ft=on&ff1=dtysince_2016&id=EJ1124635
- ²³ Chart contents taken verbatim with minor alterations to wording from: Oviatt et al., Op. cit., p. 350.

²⁴ "Teacher Guide to Online Learning," Op. cit., p. 22.

²⁵ Sansone, C. et al. "Self-Regulation of Motivation When Learning Online: The Importance of Who, Why and How." *Educational Technology Research & Development*, 59:2, April 2011. pp. 200–202. Accessed via EBSCOhost

²⁶ McCombs, B. "Developing Responsible and Autonomous Learners: A Key to Motivating Students." American Psychological Association. <https://www.apa.org/education/k12/learners>

²⁷ Bulleted text taken verbatim from: Ibid.

²⁸ Chart contents taken verbatim from: "Teacher Guide to Online Learning," Op. cit., p. 24.

²⁹ Ibid., p. 22.

³⁰ Pentaraki and Burkholder, Op. cit., p. 10.

³¹ Chumbley et al., Op. cit., p. 165.

³² Stanley, D. and Y. Zhang. "Student-Produced Videos Can Enhance Engagement and Learning in the Online Environment." *Online Learning*, 22:2, June 2018. p. 5.

https://eric.ed.gov/?q=student+engagement+online+learning&ft=on&ff1=dtSince_2016&id=EJ1181370

³³ "Teacher Guide to Online Learning," Op. cit., p. 25.