Self-Directed Learning Instructional Model

Campus Resource Guide

Created by:

[The Postsecondary Teaching with Technology Collaborative]

The Self-Directed Learning (SDL) Instructional Model includes this Campus Resource Guide and a Course Implementation Guide. The model offers college educators three evidence-based strategies to help college students manage their online learning. These strategies tackle key challenges by helping students cultivate habits that are strongly related to student success:

- Student Peer Interaction and Networking (SPIN): An introductory questionnaire and collaborative activities to foster belonging and promote help-seeking
- SDL Videos: Short videos to support sense of belonging, planning for learning, confidence, and self-efficacy through a growth mindset
- SDL Prompts: Reflection questions focused on help-seeking, task-planning, and reflection

The Instructional Model was co-developed with faculty and administrators and piloted at five broad access institutions.

This **Campus Resource Guide** provides practical tips for college leaders and staff to help faculty adopt the SDL Instructional Model. Inside, you will find materials for institutional and instructional leaders, including deans, professional development providers, instructional designers, and others who set the vision for instructional excellence at the college or university.

Review the ***Course Implementation Guide***, a companion to this document. The Course Implementation Guide provides faculty with detailed guidance to integrate the strategies into a course. It includes a pacing guide on when to implement each strategy, ready-to-use text that can be cut and pasted into a learning management system, and other resources for teaching with the strategies.

What's Inside?

Information for College Leaders: Adopting the Self-Directed Learning Instructional Model on Your Campus: This section provides a brief overview of the Instructional Model and shares how administrators and academic unit leaders can facilitate adoption of the Instructional Model in online courses within and across departments.

The Science Behind Self-Directed Learning: This section provides theory and evidence that establishes why these strategies are beneficial for students in online courses.

Resources for Educational Developers: This section includes practical tools and resources for educational developers to introduce faculty to the model. "Educational developers" refers to any faculty or staff who support the professional learning of other faculty members, including professional developers, instructional designers, instructional coaches, and faculty. The resources include customizable materials for a one-time training session, a more intensive and sustained professional learning experience, and ways to stay in touch with implementing faculty.

- Getting Started: An Introductory Workshop
- Going Deeper: A Professional Learning Community
- Staying in Touch: Additional touchpoints for faculty

Appendix: This section includes additional resources for educational developers to support faculty to implement the model, including an SDL Activity Implementation Plan template for scheduling the SDL strategies in a course and additional details on the resources for educational developers.

Information for College Leaders: Adopting the Self-Directed Learning Instructional Model on Your Campus

College students show high interest in online courses, but some research shows lower success rates relative to in-person formats, and many faculty report frustrations with student engagement and learning.[1] As college leaders seek to improve college persistence and completion, strategies that bolster student success within online courses are a valuable tool. Research indicates that students in online courses benefit from support that improves course culture and helps them build effective habits for managing their learning.

The Self-Directed Learning (SDL) Instructional Model offers a set of evidence-based instructional strategies that support students' proactive habits for managing how they learn in online courses. These course-embedded strategies reinforce and contextualize concepts that may have been introduced in student orientation or college success courses, helping students face the unique demands and challenges of online classes. The Instructional Model includes SDL videos with planning questions, reflection prompts, and collaborative learning activities called student-peer interaction and networking (SPIN). The materials include a step-by-step guide for implementing the SDL strategies throughout a course.

In this video, ***How Students Experience Self-Directed Learning Strateiges in Online Courses*****,** students tell the story of how and why the strategies have helped them in online courses.

Over multiple rounds of testing in introductory online STEM courses, both faculty and students report positive gains from these approaches. For more information about the research, including the positive impacts of the strategies, check out the ***Science Behind Self-Directed Learning*****.**

Institutional leaders will play a key role in supporting successful adoption of the SDL Instructional Model by:

1. Helping faculty and others see the relevance of the Instructional Model to other important institutional initiatives
2. Identifying champions who can speak to the benefits of the model for faculty and students and support its adoption
3. Integrating the Instructional Model into existing professional development infrastructure and deploying resources to support faculty learning
4. Supporting strategic planning around how the model can be implemented across disciplines and courses

Help faculty and others see the relevance of the Instructional Model to other important institutional initiatives

The SDL Instructional Model may align with the college's strategic planning goals and enhancement plans to improve student learning and success. Relevant institutional goals and initiatives may be related to improving success for students in high-enrollment general

---

1 Altindag, D. T., Filiz, E. S., & Tekin, E. (2021). Is online education working? (Working Paper 29113). National Bureau of Economic Resources. http://www.nber.org/papers/w29113.

Brown, A. E., Bickerstaff, S., & Edgecombe, N. (2024). Supporting learning online: Perspectives of faculty and staff at broad-access institutions during COVID-19. Postsecondary Teaching with Technology Collaborative. https://postseccollab.org/supporting-learning-online-perspectives-of-faculty-and-staff-at-broad-access-institutions-during-covid-19/.

education courses, improving retention for first-year students, strengthening the pipeline to STEM programs or transfer programs, and improving success for first-generation college students, among others.

To help faculty and others see the relevance of the Instructional Model to the college's priorities, leaders can communicate how the model fits into changes underway on campus.

Messages may include:

- Online courses present challenges for student engagement, learning, and retention, and faculty and students can benefit from course-based strategies designed to support learning success.
- The Instructional Model is evidence-based and promotes key learning habits that are strongly related to student success, including developing a sense of belonging that builds social connections, planning time for coursework, reflecting on progress to develop confidence and self-efficacy, and learning how to seek help when needed.
- The SDL strategies are easily embedded into a learning management system (LMS) and complement course content goals by creating an environment that fosters engagement and can positively influence persistence in a course.
- The Instructional Model can help the college achieve its broader strategic goals to improve retention, help students stay on their learning path, recruit more students into STEM programs, meet the needs of diverse learners.

Identify champions who can speak to the benefits of the Instructional Model for faculty and students and support its adoption

Identifying individuals who can support or expand adoption of the SDL Instructional Model can help leaders secure a base of user advocates. This may include:

- **Early adopters and champions** who can share their experiences of using the Instructional Model with colleagues. For example, some faculty may fear that adding the SDL strategies to a course will be too time-intensive or disruptive to their teaching. Champions can describe their positive experiences using the model and speak to its usability and benefits. These champions can also collect and analyze course-level data to provide local examples of positive outcomes.
- **Educational developers** who can use materials in this Campus Resource Guide to lead workshops and other professional learning opportunities about the Instructional Model. Educational developers may include leaders of a Center for Teaching and Learning and faculty with expertise in online teaching, as well as faculty and staff who facilitate professional development.
- **Technical supporters** such as instructional designers who can embed the strategies into the college's LMS. Technical supporters can provide practical assistance to faculty and help lower any hurdles faculty may perceive in implementing the technical aspects of the Instructional Model.

Integrate the Instructional Model into existing professional development infrastructure and deploy resources to support faculty learning

To introduce faculty to the SDL Instructional Model and build their capacity to implement it, institutions can integrate information about the Instructional Model into existing faculty development structures such as new faculty orientation, convocation, all-staff professional development days, and ongoing workshops and inquiry groups. Many institutions have faculty training requirements or course design guidelines for online courses that focus on a combination of technology use and teaching practices. The instructional strategies could be embedded into these materials. The **Resources for Educational Developers** section provides guidelines and ready-to-use resources for a one-time professional development workshop as well as for more extended, in-depth faculty learning.

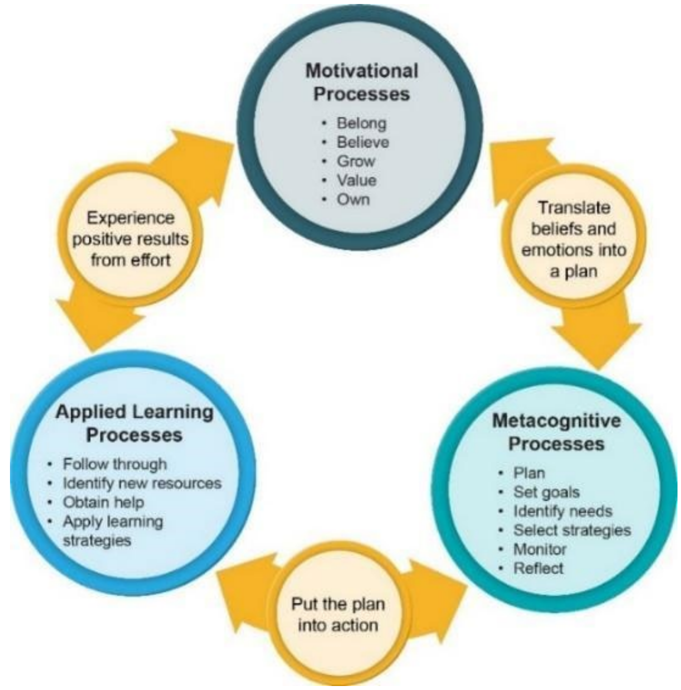
Faculty may be hesitant to commit to additional professional development on top of the learning opportunities they are pursuing for their own professional growth. Therefore, embedding an introduction to the Instructional Model into existing institutional structures may be the best way to promote it. Institutions can also offer stipends or professional development credits to incentivize faculty to attend workshops focused on the Instructional Model.

Support strategic planning around how the Instructional Model can be implemented across disciplines and courses.

The SDL Instructional Model may first be implemented by a few enthusiastic faculty who take the initiative to use the strategies in their course sections. However, a key question may soon emerge: Should the model be systematically integrated into some courses? And if so, which ones? While researchers and college educators have tested the Instructional Model extensively in online STEM courses, co-development partners and faculty believe the model can be valuable in other disciplines and course modalities.

Institutional leaders can facilitate conversations with deans and faculty about the needs of online students and faculty and the courses that will benefit most from the Instructional Model. This may include a review of course outcome data. Faculty may wonder if the strategies will feel repetitive for students if encountered in multiple courses; yet the strategies are intended to be highly contextualized to the course, giving students opportunities to apply learning skills in real time, discipline-based situations. Institutional leaders can help leaders, faculty, and educational developers think strategically about deploying the strategies in ways that reinforce skills throughout a student’s time at the institution. Instructional designers may be able to centrally embed strategies into an LMS to reduce the burden on faculty and facilitate broader adoption.

The Science Behind Self-Directed Learning



Building understanding of the importance of three core psychological processes to student success

The Self-Directed Learning (SDL) Instructional Model builds on decades of research into how people learn. The circles in the graphic show three core psychological processes, their respective subprocesses, and how the three processes mutually reinforce one another. Learn more about the foundational research underlying the strategies in the Instructional Model in the report, ***Teaching and Designing Online STEM Courses to Support Self-Directed Learning Skills***.

Fostering key psychological processes through instructional strategies

To strengthen these three core psychological processes, the Postsecondary Teaching with Technology Collaborative has developed three online strategies: SDL prompts, SDL videos, and collaborative activities through student-peer interaction and networking (SPIN). We intend for the strategies to be dynamic and mutually reinforcing:[2] Students initially reflect on their motivational processes, which leads to active use of metacognitive and applied learning processes. Using these three processes leads to learning success, which feeds positive emotions and refuels students' motivation, starting the cycle anew.

- Students begin by completing a SPIN questionnaire and watching short videos to develop course motivation, goals, sense of belonging, and time management plans.

- Next, students respond to reflective prompts applying metacognitive processes for developing study plans, and tracking progress.

- Then, students participate in collaborative SPIN activities, building productive applied learning habits, such as gathering resources and seeking help.

These strategies follow a microlearning approach that offers "bite-sized learning" experiences while students advance through course assignments in an LMS. Faculty can integrate these strategies directly into their curriculum to supplement their current assignments.

2 Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68.

Research results on the impact of implementing the SDL strategies

The Collaborative has conducted three phases of research to deepen the education field's understanding of how SDL strategies can support college students' achievement in online STEM courses. The first phase, completed in 2024, involved rapid studies with 24 instructors from four partner institutions who embedded *at least one* of the three SDL strategies into online courses. The second phase, also completed in 2024, studied the feasibility of engaging instructors and students in using *all three* SDL strategies. The third phase, conducted in 2025, studied the effects of all three SDL strategies in a sample of 25 course sections at five institutions.

> Explore more detailed findings from the rapid studies in our paper, *Technology-Based Instructional Strategies Show Promise in Improving Self-Regulated Learning Skills at Broad-Access Postsecondary Institutions*.
>
> Find more information on the findings from our feasibility in our white paper, *Using Self-Directed Learning to Improve Online Learning*.

Early findings:

- Students said that both reflective prompts and short videos helped them assess their weekly workload and schedule time for studying.
- Most instructors found the strategies easy to integrate into online courses and provided helpful insights into students' learning needs. Some adjusted their instruction based on these insights.
- Students in classes implementing at least one SDL strategy reported using more applied learning strategies and reflecting on how to use them.
- We found positive, statistically significant impacts on applied learning and metacognitive outcomes.
- Impacts on end-of-course grades were insignificant, but Bayesian analyses[3] indicate a 78% probability that the strategies had a positive effect on grades.
- There is no evidence of differences in effectiveness across the strategies, student populations, or courses.

3 These analyses incorporate our impact estimates and prior evidence of effectiveness of postsecondary strategies. Deke, J., Finucane, M., & Thal, D. (2022). The BASIE (BAyeSian Interpretation of Estimates) framework for interpreting findings from impact evaluations: A practical guide for education researchers (NCEE 2022-005). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. https://eric.ed.gov/?id=ED618864.

Resources for Educational Developers

The Course Implementation Guide includes detailed information about each strategy, including ready-to-use text, so that faculty have enough information to integrate the full SDL Instructional Model into any course. However, faculty will benefit from support before and during their implementation. In this section, you will find resources for educational developers: faculty and staff who facilitate professional development, instructional designers, and others who support faculty with teaching and course design. This section includes three types of resources:

Getting Started with SDL Strategies

This slide deck and supporting materials give educational developers the tools to facilitate a workshop to introduce the Instructional Model to faculty and help them integrate the three strategies into their online courses.

Going Deeper

To build on the Getting Started workshop, educational developers can go deeper with an outline for four additional meetings to support deeper exploration of SDL concepts and practices for faculty implementing the three strategies. These meetings may be formatted as a professional learning community, seminar, or faculty inquiry group.

Staying in Touch

Educational developers can use these materials to reach out to faculty during the term to provide reminders and tips. This section includes a proposed timeline for faculty outreach as well as draft language for each message.

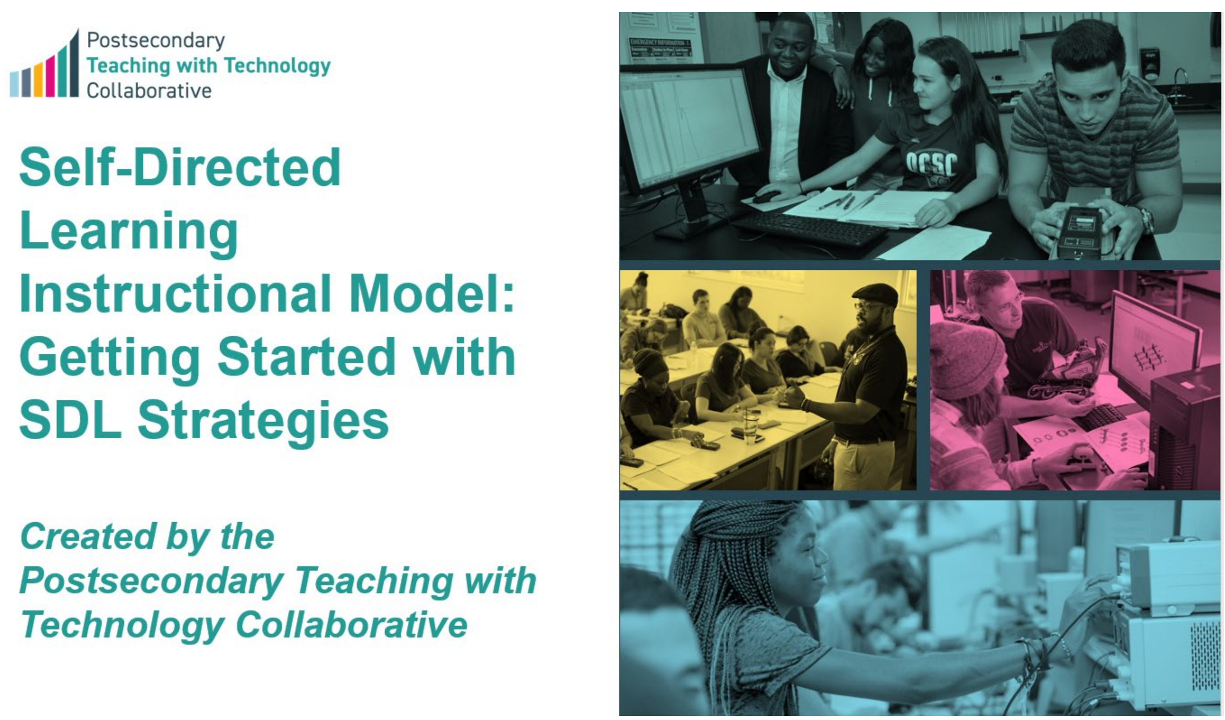
Getting Started Materials

The Getting Started content is structured in modular format to allow for flexible implementation. Ideally, educational developers can facilitate a 90-minute workshop to introduce all the content together, virtually or in person. If it is not feasible to host a 90-minute synchronous meeting, the content can also be shared in sections virtually or in person at various standing meetings, such as staff meetings. Finally, the content can be shared asynchronously for faculty to review themselves. The Getting Started workshop should be held before the semester begins, to provide adequate time for faculty to incorporate the strategies into their courses. The workshop materials (1) an annotated agenda for the workshop, (2) a slide deck with content and detailed slide notes for either leading the workshop or for self-instruction; and (3) a planning guide to assist in determining the implementation timing of each strategy.

Slide deck for the Getting Started workshop: These slides have the content and notes for a 90-minute workshop presented in four modules.

1. Why Focus on Self-Directed Learning (SDL)?
2. Introduction to the Self-Directed Learning Instructional Model
3. How to Implement the Instructional Model in Your Course
4. How Did the SDL Instructional Model Come About?

The slides can be customized and reordered, based on the needs of the audience.



Appendix A includes an **SDL Activity Implementation Plan**. Faculty can use this planning template to schedule the instructional strategies throughout the course. Instructional support staff can collect and review planners to monitor implementation and provide additional support as needed. The **Annotated Agenda** in ***Appendix B*** will serve as a facilitator's guide for the workshop, in conjunction with the slide notes.

Going Deeper Materials

To support faculty who have an interest in learning and reflecting collaboratively to improve their implementation of the Self-Directed Learning (SDL) Instructional Model, facilitators can build on the Getting Started workshop by convening a series of meetings with a cohort of faculty. Below, you will find an outline for four 90-minute meetings. Slides from the Getting Started workshop can be repurposed for these meetings. The meeting topics focus on teaching in online courses, but these materials can be adapted to include faculty teaching in other modalities.

This seminar, professional learning community, or inquiry group may unfold over several months or may be adapted to other structures (e.g., a one-week intensive, a full-day retreat). Faculty may engage with this content before they begin implementing the Instructional Model, or they may participate during their first term of implementation. If these sessions are offered while faculty are teaching with the Instructional Model, it can support them in making refinements and improvements in future terms. Educational developers can set the cadence for these meetings and host them virtually or in person, based on faculty availability and interest. **A detailed description of activities for each meeting is in *Appendix C*.**

Summary Meeting Topics

Meeting 1: Digging Deeper into the Value of Self-Directed Learning

Faculty are busy, their time is valuable, and their courses are filled with important content. Therefore, a key aspect of supporting faculty to implement the SDL Instructional Model is helping them understand the value and importance of supporting SDL in disciplinary courses taught online. This session should emphasize that students with stronger SDL skills are more successful in college and that students need help to apply SDL in content-area courses, even if they have been exposed to these concepts through other college programs.

Learning Objectives

1. Identify problems of practice in online classes that may be addressed with SDL strategies
2. Explore how reinforcing SDL in online courses complements other college-wide SDL supports (e.g., student success courses, academic coaching)

Potential Activities

- Introductions and community-building activity (15 mins)
- SDL framework refresher (15 mins)
- Investigate problems of practice in online courses (30 mins)
- Explore other SDL supports at the college (30 mins)

Meeting 2: Mapping Strategies to Course Content

The SDL Instructional Model includes a pacing guide that provides a framework for the ideal timing of strategy implementation in online courses. But faculty still have many choices when deciding how to implement the strategies, including when and how to connect them to course content and activities. This session will invite faculty to explore the flow of a single online course and identify opportunities to integrate the strategies—for example, by appending them to existing assignments or using them as precursors to units or topic areas.

Learning Objectives

1. Identify how strategies can integrate with existing course content
2. Customize strategy placement for a specific online course

Potential Activities

- Community-building activity (10 mins)
- Review the Instructional Model pacing guide (15 mins)
- Map the strategies to course content (35 mins)
- Share and brainstorm creative approaches to integrating SDL strategies into assignments (30 mins)

Meeting 3: Designing High-Quality Collaborative Work in Online Courses

SPIN, one of the three SDL strategies, is centered on collaboration, which is beneficial for student motivation and help-seeking. Students report that feelings of isolation are among their primary challenges with online course formats. Yet designing meaningful and successful collaborative work can be difficult, especially in online courses. This session will engage faculty in considering the principles for high-quality collaborative work, reflecting on successful and unsuccessful online collaborative activities, and designing a collaborative assignment for a course they plan to teach.

Learning Objectives

1. Explore theoretical and empirical perspectives on the benefits of collaboration for postsecondary learners
2. Identify features of successful and unsuccessful collaborative learning experiences
3. Design a collaborative learning activity that meets a learning need in a specific online course

Potential Activities

- Community-building activity (10 mins)
- Review the benefits of collaboration (10 mins)
- Share successes and challenges in facilitating collaboration in online courses (25 mins)
- Design or update a collaborative learning activity (45 mins)

Meeting 4: Learning from Students and Refining Approaches

The SDL Instructional Model provides faculty with many opportunities to hear directly from students about their learning experiences, including perceived strengths and weaknesses. As part of each strategy, students will share personal reflections related to their sense of belonging, planning, confidence, and other SDL skills in their online course. This session will explore how faculty can learn from these student responses, offer feedback, and make adaptations in current and future courses to address student needs.

Learning Objectives

1. Identify opportunities to provide efficient and supportive feedback to students as part of the Instructional Model
2. Anticipate opportunities to make changes to instructional practices in response to student reflections

Potential Activities

- Community-building activity (10 mins)
- Share feedback approaches (30 mins)
- Revisit the pacing guide with feedback in mind (30 mins)
- Final reflections and looking ahead (20 mins)

Staying in Touch

Instructional coaches can use the Staying in Touch resources as an optional way to connect with faculty to check if they need any support to implement the SDL Instructional Model effectively. Below is a proposed schedule for five touchpoints throughout a course and example text.

Educational developers can select their mode of delivery (e.g., direct emails, newsletters) and update the cadence as best fits the course structure and length in their institutions.

Touchpoint	% of way through course	General content
1	Before course begins	▪ Summary and recording of Getting Started workshop ▪ SDL Activity Implementation Planner to ensure faculty have a plan to embed the SDL strategies (see Appendix A for examples) ▪ Ask for any questions or challenges with starting implementation
2	0%	▪ SPIN introductory questionnaire ▪ SDL videos: Sense of Belonging and Time Management ▪ Tips on SDL videos
3	40%	▪ SDL prompts: Assessment wrapper ▪ SDL videos: Growth Mindset ▪ Tips on prompts
4	80%	▪ SPIN collaborative activity ▪ Tips on collaborative activities ▪ Reminder about message to a future student
5	90%	▪ SDL prompts: Message to a future student ▪ General wrap-up activities

Here is an example of the first touchpoint, designed to be sent before the course begins. **Find the example text for the additional touchpoints in *Appendix D*.**

Subject: Self-Directed Learning Instructional Model | Touchpoint 1

Hi [Faculty Name],

I hope this email finds you well! To support your implementation of the SDL Instructional Model, every few weeks I will reach out with resources and tips about implementing the SDL strategies. Between these official touchpoints, please don't hesitate to reach out with any specific questions!

SDL Strategy Implementation

Thank you all for attending the Getting Started workshop. In this workshop, we provided an overview of the three SDL strategies. For your reference, we have saved all the materials from the workshop <here>, including:

- **Workshop materials:** The recording and slides from the workshop.
- **Course Implementation Guide:** The overview document and the three strategy-specific documents.

- **SDL Activity Implementation Planner:** Individual planning documents. The first tab in the spreadsheet is an example. Go to the second tab to add your specific information. Please complete your plan **no later than the first day of your course**!

Please take 1 minute to reply with the following:

1. Reply, YES or NO, to this statement: “I feel confident in my plan to implement all three strategies in my course this semester.”

If no, also share:

1. Which strategy(ies) are you not confident with?
2. What additional resources or support would be helpful?

If yes, just reply “yes.”

If you do not feel confident, I will reach out to provide further support. Thank you for your dedication! Thanks,

Appendix | Campus Resource Guide

Table of Contents

Appendix A: SDL Activity Implementation Planner

Faculty can use this table to plan their implementation of the three strategies included in the Self-Directed Learning (SDL) Instructional Model. The first table is an example of how to fill out the plan, and the second table is a blank template for faculty. While the pacing guide provides a suggested cadence for implementation, faculty can choose how and when to implement the strategies to best meet the needs of their students. Faculty can fill it out asynchronously or in the initial workshop introducing the Instructional Model. Educational developers can review the plan during additional touchpoints to ensure faculty feel supported in their implementation of the strategies.

SDL Activity Implementation Plan: Example

Strategy: Activity	Implementation timing	Alignment with syllabus	Delivery method	Description and adaptations
List the strategy and specific activity	*Specify the week of the course and release date*	*Specify what unit and/or assignment*	*Specify how and where you will embed the activity in the course (e.g., discussion forum, survey)*	*Describe any planned adaptations from the Instructional Model. For SPIN 2, include the specific planned collaborative activities*
SPIN: Introductory Questionnaire	Week 1: January 7	Course launch	I will distribute the introductory questionnaire as a survey assignment. I will share summary tables of student responses in class.	I will prioritize fun questions as well as questions around preferred modes, methods, and timing of communication. I will set up a required discussion board post to have students reflect on what they learned.
SDL Videos: Sense of Belonging	Week 1: January 7	Course launch	I am going to use our LMS to create an embedded page to share the video links from YouTube. I will include the introductory text at the top of the page and then include the link to the video right below it. The reflection questions will be an assignment for extra credit.	In the reflection assignment, I will include the following help-seeking options: ▪ Attending office hours ▪ Visiting the STEM Center ▪ Visiting the Science Resource Center ▪ Individualized Learning Center tutoring ▪ Forming a student study group

Strategy: Activity	Implementation timing	Alignment with syllabus	Delivery method	Description and adaptations
List the strategy and specific activity	*Specify the week of the course and release date*	*Specify what unit and/or assignment*	*Specify how and where you will embed the activity in the course (e.g., discussion forum, survey)*	*Describe any planned adaptations from the Instructional Model. For SPIN 2, include the specific planned collaborative activities*
SDL Videos: Time Management	Week 2: January 14	Second week	I am going to use our LMS to create an embedded page to share the video links from YouTube. I will include the introductory text at the top of the page and then include the link to the video right below it. The reflection questions will be an assignment for extra credit.	No planned changes.
SDL Prompts: Reflective prompts 1	Week 3: January 21	Launch of Unit 2	I am going to use our LMS student discussion board for the prompts.	No planned changes.
SDL Videos: Growth Mindset	Week 4: January 28	After first quiz in Unit 2	I am going to use Moodle to create an embedded page to share the video links from YouTube. I will include the introductory text at the top of the page and then include the link to the video right below it. The reflection questions will be an assignment for extra credit.	No planned changes.
SDL Prompts: Pre-Assessment Wrapper	Week 5: February 4	Week before midterm	I am going to use our LMS student survey feature for giving students the exam wrappers.	I will adjust the options for how students plan to prepare to align with my course.
SDL Prompts: Post-Assessment Wrapper	Week 6: February 11	After graded midterm is returned	I am going to use our LMS student survey feature for giving students the exam wrappers.	No planned changes.

Strategy: Activity	Implementation timing	Alignment with syllabus	Delivery method	Description and adaptations
List the strategy and specific activity	*Specify the week of the course and release date*	*Specify what unit and/or assignment*	*Specify how and where you will embed the activity in the course (e.g., discussion forum, survey)*	*Describe any planned adaptations from the Instructional Model. For SPIN 2, include the specific planned collaborative activities*
SPIN: Collaborative Activity 1	Week 8: February 25	Part of Unit 3	This will be a graded assignment that students can work on outside of class time. I will assign groups based on the introductory questionnaire responses regarding what time of day students usually like to do work.	I will do a group lab assignment to launch Unit 3, with clear expectations. After the lab, I will ask students to complete a team feedback form. I will aggregate the results and share lessons with the class via a discussion board, asking students to reply as they feel comfortable.
SDL Prompts: Reflective Prompts 2	Week 9: March 4	Launch of Unit 4	I am going to use our LMS student discussion board for giving students the prompts.	As this aligns with the launch of Unit 2, I will add a concept-specific prompt about Unit 1.
SPIN: Collaborative Activity 2	Week 12: March 25	Part of Unit 5; align concept mapping activity with preparation for final exam	I will use small breakout rooms for this activity in a synchronous portion of my class.	I will do a concept-mapping activity to support students' preparation for the final exam. I will create a concept map summarizing information from across all five units and ask students to work in groups to identify any mistakes. We will share out as a class.
SDL Prompts: Message to a Future student	Week 15: April 15	Last week of class before final	This will be a graded assignment.	No planned changes; depending on responses, it is possible I will use these messages in future classes.

SDL Activity Implementation Plan: Template

Strategy: Activity	Implementation Timing	Alignment with syllabus	Delivery method	Description and adaptations
List the strategy and specific activity	*Specify the week of the course and release date*	*Specify what unit and/or assignment*	*Specify how and where you will embed the activity in the course (e.g., discussion forum, survey)*	*Describe any planned adaptations from the integrated model. For SPIN 2, include the specific planned collaborative activities*
SPIN: Introductory Questionnaire (Week 1)				
SDL Videos: Sense of Belonging (Week 1)				
SDL Videos: Time Management (within first two weeks)				

Strategy: Activity	Implementation Timing	Alignment with syllabus	Delivery method	Description and adaptations
SDL Prompts: Reflective Prompt 1 (flexible)				
SDL Videos: Growth Mindset (after first major assessment)				
SDL Prompts: Pre-Assessment Wrapper (one week before first major assessment)				
SDL Prompts: Post-Assessment Wrapper (one week after first major assessment)				

Strategy: Activity	Implementation Timing	Alignment with syllabus	Delivery method	Description and adaptations
SPIN: Collaborative Activity 1 (flexible)				
SDL Prompts: Reflective Prompt 2 (flexible)				
SPIN: Collaborative Activity 2 (flexible)				
SDL Prompts: Message to a Future Student (final weeks of course)				

Appendix B: Annotated Agenda for Getting Started Workshop

This agenda is structured in modular format to allow for flexible implementation. Ideally, instructional support staff can facilitate a 90-minute training workshop to introduce all the content together, virtually or in person. If it is not feasible to host a 90-minute synchronous meeting, the content can also be shared in sections (virtually or in person) at various standing meetings. Finally, the content can be shared asynchronously for faculty to review themselves. This learning kit should be implemented before the semester begins, or at the very start of the semester, to allow faculty to implement all strategies within their courses.

Workshop objectives

- Faculty will understand the **why**, **what**, and **how** of the Self-Directed Learning (SDL) Instructional Model.
  - **Why**: Faculty will build a shared understanding of the importance of SDL skills in online courses and a Framework for SDL.
  - **What**: Faculty will learn about the three strategies included in the Instructional Model.
  - **How**: Faculty will learn about resources to help them implement the Instructional Model in their courses.
- Faculty will start to build relationships with other faculty implementing the strategies to build foundation to the professional learning communities (if applicable).

Introductions (10 minutes)

Purpose

The purpose of this section is to introduce participants to the workshop and prime them for the information they are about to receive. If the meeting is synchronous, this is an important time for faculty to start to build relationships.

Content

- Welcome participants
- Review the agenda
  - If presented in modular form, facilitators should acknowledge that the module they are introducing is part of a larger series.
- Incorporate an opening question, such as:
  - What challenges do you face in teaching online courses?
  - What does “self-directed learning” mean to you?

Materials

- Slides 1–4

Module 1. Why Focus on Self-Directed Learning (SDL)? (10–15 minutes)

Purpose

The purpose of this section is to share the "why" behind SDL to build buy-in and engagement in the Instructional Model. Facilitators will provide an overview of challenges faced in online courses, and in particular STEM, and how developing SDL skills and mindsets can help mitigate the challenges.

Content

- Share challenges in online courses as identified by research, focusing on STEM learning.
  - If time allows, facilitator can ask participants to share their thoughts on challenges in online courses, asking:
    - What challenges do you face in teaching online courses?
    - What challenges do you see your students facing?
- Introduce the framework for self-directed learning, and its three core processes: motivational, metacognitive, and applied learning.
  - If there's time, facilitator can ask participants to reflect on practices they already do to promote these processes and skills, asking: What strategies or resources participants already use to:
    - Increase student motivation?
    - Help students reflect on their learning?
    - Help students study more effectively?

Materials

- Slides 4–10
- Postsecondary Teaching with Technology Collaborative Report: ***Teaching and Designing Online STEM Courses to Support Self-Directed Learning Skills.***

Module 2. Introduction to the Self-Directed Learning (SDL) Instructional Model (10 minutes)

Purpose

The purpose of this section is to introduce the SDL Instructional Model at a high level to ensure participants understand the model in its entirety before diving into the specifics. Facilitators will share the three strategies, their alignment with the five skills shared in the last module, and resources to support implementation.

Content

- Describe the three strategies co-developed and tested, and how they target the five skills.
- Present the five specific skills aligned with these processes targeted by the Instructional Model.
- Introduce the Course Implementation Guide and highlight the pacing guide.
- Answer prepared commonly asked questions about the pacing guide and, if there is time, ask participants if they have questions on the guide.
  - Note: It may be better to wait for questions until you go deeper into the strategies.

Materials

- Slides 11–17
- Course Implementation Guide
- Pacing guide (page 4 of the Course Implementation Guide)

Module 3. How to Implement the SDL Instructional Model in Your Course (35 minutes)

Purpose

The purpose of this section is to guide faculty through implementation of the three strategies. For each strategy, facilitators will highlight specific sections of the Course Implementation Guide aligned with that strategy, discuss implementation considerations, and leave time for questions.

Content

- Highlight the specific strategy sections of the Course Implementation Guide and general practices for how and when to embed the strategies (5 minutes)
- Introduce each strategy (8 minutes per strategy)
- Overview of the strategy: what, why, and when
- Detailed information about the strategy
- Considerations for implementations
- FAQs

Materials

- Slides 18–44
- Course Implementation Guide
- Prompts Section
- SDL videos Section
- SPIN Section

Module 4. How Did the SDL Instructional Model Come About?

Purpose

The purpose of this section is to provide information on the Postsecondary Teaching with Technology Collaborative (the Collaborative) to demonstrate how the SDL Instructional Model was developed. Facilitators will emphasize how it was a collaborative process, co-developed in partnership with institutional partners.

Content

- Describe the Collaborative
- Present the multiple stages of Collaborative research
- Share findings from the pilot study

Materials

- Slides 45–49
- Postsecondary Teaching with Technology Collaborative report: ***Technology-Based Instructional Strategies Show Promise in Improving Self-Regulated Learning Skills at Broad-Access Postsecondary Institutions*.**
- ***What Works Clearinghouse Report: Using Self-Directed Learning to Improve Online Learning***,[4]

Wrap-Up and Next Steps (5 minutes)

Purpose

The purpose of this section is to close the meeting, sharing next steps for participants.

Content

- Share next steps
- Questions

Materials

- Slides 50–53
- SDL Activity Implementation Planner (**Appendix A**)

4 Dabbagh, N., Bass, R., Bishop, M., Costelloe, S., Cummings, K., Freeman, B., Frye, M., Picciano, A. G., Porowski, A., Sparrow, J., & Wilson, S. J. (2019). Using technology to support postsecondary student learning: A practice guide for college and university administrators, advisors, and faculty (WWC 20090001). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

Appendix C: Possible Meeting Structure and Topics

Meeting 1: Digging Deeper into the Value of Self-Directed Learning

Faculty are busy, their time is valuable, and their courses are filled with important content. Therefore, a key aspect of supporting faculty to implement the Self-Directed Learning (SDL) Instructional Model is helping them understand the value and importance of supporting SDL in online disciplinary courses. This session should emphasize that students with stronger SDL skills are more successful in college, and students need help to apply SDL skills in content-area courses, even if they have been exposed to these concepts through other college programs.

Learning Objectives

1. Identify problems of practice in online classes that may be addressed with SDL strategies
2. Explore how reinforcing SDL in online courses complements other college-wide SDL supports (e.g., student success courses, academic coaching)

Potential Activities

- Introductions and community-building activity (15 mins)
  - Each session could begin with a community-building activity or icebreaker that allows participants to get to know one another. Examples include general check-in questions (“What’s one good thing that happened to you this week?”) or questions aimed at priming participants for the discussion topics (“Name one online teaching strategy that you’ve found to be successful”).
- SDL framework refresher (15 mins)
  - This section could be adapted in length and depth, depending on how familiar participants are with the concepts underlying the framework for self-directed learning.
- Investigate problems of practice in online courses (30 mins)
  - In pairs, small groups, or a large group, list teaching and learning challenges in online courses.
  - Work collaboratively to make connections between these problems of practice and concepts in the SDL framework (e.g., missing assignments may be connected to low *motivation* or lack of *planning*).
  - Identify which SDL strategy might address these problems. (This could be done with Post-it notes, where strategies are placed on top of problems, or on a collaborative online whiteboard.)
- Explore other SDL supports at the college (30 mins)
  - List supports available to students at the college that promote SDL (e.g., new student orientation, student success courses, tutoring, academic coaching).
  - Invite a guest speaker (e.g., director of student support or student success course instructor) to share the specific ways that these programs or services support SDL.
  - Brainstorm why and how the SDL Instructional Model is an important complement and extension of these supports by supporting students to apply these skills in online content-area courses.

Resources

- Getting Started Workshop Module 1: Why Focus on Self-Directed Learning (SDL)?
- ***The Science Behind Self-Directed Learning***

Meeting 2: Mapping Strategies to Course Content

The SDL Instructional Model includes a pacing guide that provides a framework for the ideal timing for strategy implementation in online courses. But faculty still have many choices to make when deciding how to implement the strategies, including when and how to make connections to course content and activities. This session will invite faculty to explore the flow of a single online course and identify opportunities to integrate the strategies—for example, by appending them to existing assignments or using them as precursors to units or topic areas. *Note: Facilitators may consider pointing faculty to online course design principles or standards (e.g., Quality Matters) to support faculty in structuring content and assignments in their online courses.*

Learning Objectives

1. Identify how strategies can integrate with existing course content
2. Customize strategy placement for a specific online course

Potential Activities

- Community-building activity (10 mins)
- Review Instructional Model pacing guide (15 mins)
  - In addition to looking at the pacing guide, it may be useful to also look at a sample SDL Activity Implementation Plan in which a faculty member has adapted the strategies to a course (see the SDL Activity Implementation Planner in Appendix A). If a faculty member in the group or at the college has used the model, reviewing their plan could be beneficial.
- Map the strategies to course content (35 mins)
  - Each faculty member identifies one online course to focus on for this activity.
  - In pairs, faculty members review the syllabus and week-by-week course plan to identify opportunities to integrate the strategies. Discussion questions may include:
    - When and how do students typically struggle in the course?
    - Is there an assignment during the first half of the course that tends to lead to a dip in confidence?
    - What are the most challenging concepts for students to master?
    - Is there a place in the course where students could benefit from collaboration with their peers?
    - Where in the course does student engagement seem to flag?
    - While considering timing and placement, discuss options for incentivizing strategies to promote student engagement (e.g., assigning points, offering extra credit).
- Share and brainstorm creative approaches to integrate SDL strategies into assignments (30 mins)

- While some strategies could be implemented in a stand-alone fashion, they can also be integrated into existing assignments for a more streamlined and seamless approach. Invite participants to share opportunities to connect strategies to their course activities. For example:
  - Embedding SDL prompt questions or SDL videos to the beginning or end of an existing assignment
  - Combining prompts with existing discussion boards forums
  - Adding the assessment wrapper prompts to an assessment review assignment
  - Embedding the message to a future student into a final portfolio
  - Inviting participants to share their course shell or planner to show how they have or plan to customize SDL strategy placement for a specific course

Resources

- Pacing guide (in the Course Implementation Guide)
- SDL Activity Implementation Planner (see ***Appendix A***)

Meeting 3: Designing High-Quality Collaborative Work in Online Courses

SPIN, one of the three SDL strategies, is centered on collaboration, which is beneficial for student motivation and help-seeking. Students report that feelings of isolation are among their primary challenges with online course formats. Yet designing meaningful and successful collaborative work can be difficult, especially in online courses. This session will engage faculty to consider the principles for high-quality collaborative work, reflect on successful and unsuccessful online collaborative activities, and design a collaborative assignment for a course they plan to teach.

Learning Objectives

1. Explore theoretical and empirical perspectives on the benefits of collaboration for postsecondary learners
2. Identify features of successful and unsuccessful collaborative learning experiences
3. Design a collaborative learning activity that meets a learning need in a specific online course

Potential Activities

- Community-building activity (10 mins)
- Review the benefits of collaboration (10 mins)
  - Quickly brainstorm the benefits of collaboration for postsecondary students.
  - Then, brainstorm any specific or different benefits for students taking courses online.
  - Research suggests that collaboration can increase sense of belonging, improve motivation, promote help-seeking, foster critical thinking and deep learning by exposing alternative points of view and different approaches, develop valued

workplace skills, reduce isolation and feelings of disengagement, and increase students' perceptions of course relevance.[5]

- Share successes and challenges facilitating collaboration in online courses (25 mins)
  - Ask participants to briefly describe an example of something that worked well to promote collaboration in an online course and/or something that fell flat.
  - Document each example on a poster or shared whiteboard.
  - Ask the group to reflect on anything they notice in common across successful and unsuccessful experiences.
- Design or update a collaborative learning activity (45 mins)
  - Working in pairs, faculty identify an existing collaborative activity they would like to revise or an opportunity to add a new activity. Collaborative activities may be either synchronous or asynchronous. As part of this discussion, they may consider:
    - How the task might be structured to align with best practices to support collaboration (see the Course Implementation Guide, Appendix A).
    - How to implement or adapt the SPIN Collaborative Reflection Tool in conjunction with the learning activity.
    - How to anticipate and mitigate challenges that may arise for students.
    - Faculty share their tasks with the whole group for comments and feedback.

Resources

Course Implementation Guide, Appendix A: SPIN Examples and Additional Guidance

Meeting 4: Learning from Students and Refining Approaches

The SDL Instructional Model provides instructors with many opportunities to hear directly from students about their learning experiences, including perceived strengths and weaknesses. As part of each strategy, students will share personal reflections related to their sense of belonging, planning, confidence, and other SDL skills in their online course. This session will explore how faculty can learn from these student responses, offer feedback, and make adaptations in current and future courses to address student needs.

Learning Objectives

1. Identify opportunities to provide efficient and supportive feedback to students as part of the SDL Instructional Model
2. Anticipate opportunities to make changes to instructional practices in response to student reflections

5 Ansari, Z., & Naseer, S. (2024). Perspective chapter: Collaborative learning benefits and its role in critical thinking. In S. Goundar (Ed.), Massive open online courses: Learning frontiers and novel innovations. IntechOpen. https://doi.org/10.5772/intechopen.1007316.

Bickerstaff, S., Thompson, A. H., Walters, K. P., & Gastelum, J. (2025). ***Beyond engagement: Promoting motivation and learning in online courses***. Postsecondary Teaching with Technology Collaborative. https://postseccollab.org/beyond-engagement-promoting-motivation-and-learning-in-online-courses/.

University of Washington Tacoma. (n.d.). Facilitating group work online. In *Digital Learning*. https://www.tacoma.uw.edu/digital-learning/facilitating-group-work-online.

Sawyer, J., & Obeid, R. (2017). Cooperative and collaborative learning: Getting the best of both words. In R. Obeid, A. Schwartz, C. Shane-Simpson, & P. J. Brooks (Eds.), How we teach now: The GSTA guide to student-centered teaching (pp. 163–177). Society for the Teaching of Psychology.

Potential Activities

- Community-building activity (10 mins)
- Share feedback approaches (30 mins)
  - In a large group or small groups, invite instructors to share ways they have offered feedback to students on reflective assignments. Examples may come from the SDL Instructional Model strategies or from similar reflective assignments. Points of discussion should include (1) efficient and sustainable feedback approaches and (2) providing affirming and constructive feedback on personal reflections. Possible feedback approaches might include:
    - Personalized feedback on each assignment (e.g., responding to each student with custom comments)
    - Personalized feedback on selected assignments (e.g., committing to providing personal feedback to each student on at least one assignment over the course of the term)
    - Collective feedback (e.g., a written or video message that summarizes key ideas and opportunities for growth across the entire class)
    - Tailored feedback (e.g., reaching out to students who reveal challenges, obstacles, or successes that warrant follow-up)
- Revisit the pacing guide with feedback in mind (30 mins)
  - In pairs or small groups, review each instructor's syllabus with embedded strategies. Look together for opportunities to deliver feedback that feel productive and reasonable. Discussion questions for this section might include:
    - Where might students benefit from a summary of key insights from the prompts?
    - What patterns have you noticed in past years (e.g., performance on a first assignment, a challenging unit) that might warrant strategic, timely feedback messages?
    - Are there opportunities to deliver feedback in multimedia formats (e.g., video or audio messages) or synchronously?
- Final reflections and looking ahead (20 mins)
  - In this final gathering, invite participants to share reflections on something they gained from this professional learning experience, a question that remains, and a next step they plan to take as they implement the Instructional Model.
  - Consider planning other synchronous or asynchronous points of connection (e.g., a casual gathering at the end of the term to reflect on their experience using the Instructional Model).

Resources

- Pacing guide (in the Course Implementation Guide)

Appendix D: Staying in Touch – Touchpoints 1 to 5

Instructional coaches can use the Staying in Touch resources as an optional way to connect with faculty to check if they need any support to implement the model effectively. Below is a proposed schedule for five touchpoints throughout a course and example text.

Educational developers can select their mode of delivery (e.g., direct emails, newsletters) and update the cadence as best fits the course structure and length in their institutions.

Touchpoint 1 (before the course)

Subject: Self-Directed Learning (SDL) Instructional Model | Touchpoint 1

Hi [Instructor Name],

I hope this email finds you well! To support your implementation of the SDL Instructional Model, every few weeks I will reach out with resources and tips about implementing the SDL strategies. Between these official touchpoints, please don't hesitate to reach out with any specific questions!

SDL Strategy Implementation

Thank you all for attending the Getting Started workshop. In this workshop, we provided an overview of the three SDL strategies. For your reference, we have attached all the materials from the workshop <here>, including:

- **Workshop materials**: the recording and slides from the workshop.
- **Course Implementation Guide**: the overview document and the three strategy-specific documents.
- **SDL Activity Implementation Planner**: individual planning documents. The first tab in the spreadsheet is an example. Go to the second tab to add your specific information. Please complete your planners **no later than the first day of your course**!

Please take 1 minute to reply with the following:

1. Reply, YES or NO, to the statement: "I feel confident in my plan to implement all three strategies in my course this semester."

If no, also share:

1. Which strategy(ies) are you not confident with?
2. What additional resources or support would be helpful?

If yes, just reply "yes."

If you do not feel confident, I will reach out to provide further support. Thank you for your dedication! Thanks,

Touchpoint 2 (0% through the course)

Subject: Self-Directed Learning Instructional Model | Touchpoint 2

Hi [Instructor Name],

As a reminder, to support your implementation of the SDL Instructional Model, every few weeks, we will send you an email of resources and tips. Please see below for SDL strategy implementation tips.

SDL Strategy Implementation

In the first few weeks of class, you are laying the foundation for a successful course with your students! To support this effort, be sure to implement the **SPIN questionnaire**, as well as the **first two videos in the SDL series** on *sense of belonging* and *time management* with the corresponding reflection questions. This trio of strategies are intended to set the foundation for course success by activating motivation and supporting students with strategies to effectively plan their learning.

We encourage you to share the *summary* results of the SPIN questionnaire with your students so you can encourage them to feel more comfortable with their peers and facilitate dialogue with your class.

Wishing you a great week ahead! Thanks,

Touchpoint 3 (40% through the course)

Subject: Self-Directed Learning Instructional Model | Touchpoint 3

Hi [Instructor Name],

We're almost halfway through the term – congratulations! Please see below for SDL strategy implementation tips to help maintain student belonging and engagement.

SDL Strategy Implementation

This is a time when students may start to feel frustrated or struggle with their coursework – now it is especially important to maintain connections with students. To support students in building self-efficacy and self-confidence, be sure to share the **video on *growth mindset***. This week, consider starting your class with a brief discussion of the video and how intelligence is not set in stone but "plastic," meaning that intelligence improves through challenge and disciplined effort.

Also, by this time you should have students complete the **assessment wrapper** to support them in preparing for the first major assessment or assignment. Don't forget to assign the reflection after they receive their grade and feedback. The goal is to encourage changes to study habits for the next assessment/assignment. Check out the Prompts section of the Course Implementation Guide for the suggested text for the wrapper.

Wishing you a great week ahead! Thanks,

Touchpoint 4 (80% through the course)

Subject: Self-Directed Learning Instructional Model | Touchpoint 4

Hi [Instructor Name],

Please see below for SDL strategy implementation tips!

SDL Strategy Implementation

This week, focus on promoting engagement in group activities. **Collaborative activities** can reduce isolation and promote help-seeking behaviors, particularly for students who feel more comfortable asking peers for assistance. When assigning group activities, be sure to explain the purpose of working in groups. Check out the SPIN Collaborative Reflection Tool, which you can update to align with your course. Consider taking some class time to highlight for students that working collaboratively, they will develop critical skills for their future academic and professional success. Check out other tips to increase student engagement in online group work in the SPIN section of the Course Implementation Guide.

Don't forget to assign the final prompt, **Message to a Future Student**, before the end of the course!

Wishing you a great week ahead! Thanks,

Touchpoint 5 (90% through the course)

Subject: Self-Directed Learning Instructional Model | Touchpoint 5

Hi [Instructor Name],

This is the final touchpoint of the term. Thank you for all of your engagement and enthusiasm this term! Please see below for information on end-of-course activities, including SDL strategy implementation tips.

SDL Strategy Implementation

Use the last activity of the instructional model, the **Message to a Future Student**, to prompt student reflection on their growth over the course of the term. Encourage student creativity by allowing them to record their messages or illustrate their reflections. Ask students to focus on their growth – what obstacles did they overcome? What have they learned about themselves through this course?

Be sure to let students know if you plan to use their messages for future terms. Refer students to their reflections from the prompts they completed earlier in the term to facilitate their thinking on the Message to a Future Student activity.

Wishing you a great week ahead! Thanks,