What is self-directed learning?

“a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.”

Knowles (1975), Self-directed Learning, p. 18.

Dimensions of self-directed learning

1. Process of learning
   - Able to define what to learn, plan for, conduct the learning, evaluate resources, and assess own learning

2. Learning strategies
   - How students study and process information

3. Performance outcomes
   - Independent learning behaviors that persist beyond graduation.

Staged Self-Directed Learning Model (SSDL)

“Good teaching” matches the learner’s stage of self-direction and helps the learner advance toward greater self-direction.

Who are our students?

- Passive learners, dependence, unmotivated.
- Unprepared to learn on their own (Doyle, 2008)
  - Do not complete reading and other prep work
  - Little practice learning in meaningful ways
  - Few opportunities to develop the skills needed to be effective independent learners
- Characteristics of the millennial generation: special, sheltered, confident, team-oriented, conventional, pressured, achieving


Cycle of Self-Directed Learning

Ambrose et al. (2010), Fig. 7.1, p. 193

ASSESS

EVALUATE

PLAN

APPLY strategies

MONITOR performance

Reflect and adjust if needed

Students’ beliefs about intelligence and learning

Evaluate strengths and weaknesses

Reflected self-awareness

“To become self-directed learners, students must learn to assess the demands of the task, evaluate their own knowledge and skills, plan their approach, monitor their progress, and adjust their strategies as needed.”

(Ambrose et al, 2010: 191)

Cultivating self-directed learners

What teachers do...

Learner-centered teaching

Instructional Design

Active learning assignments and activities

Modeling Learning Strategies

What students do...

Student as learner

Characteristics, motivation, goals

Metacognition

Self-assessment

Reflection

Self-awareness

Self-directed learners

Role of teacher in supporting SDL

- What teaching methods and active learning strategies could you use to promote SDL?
- Syllabi, classroom experiences, and assignments that cultivate SDL
“The instructional design aspects of the teacher’s role are much more important in learner-centered environments. Activities and assignments become the vehicles by and through which learning occurs.” (Weimer, 2002: 85).

Self-Directed Learning by Design

- Select an assignment, or activity in which you would like to promote SDL.
- Plan for integrating skill development into your course, assignment, or activity goal(s).
- Complete the worksheet

Write – Pair – Share
Cultivating Self-Directed Learners by Design

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Association of American Colleges & Universities Meeting  
General Education and Assessment:  
Disruptions, Innovations, and Opportunities  
Portland, Oregon

Session Materials

Description: Participants will consider what it means for students to be “self-directed” within a discipline, and will reflect on practices that help students develop self-directed learning skills, whether they are novice or expert learners.

Professors often lament students’ inability to take responsibility for and control of their own learning. They want students to be engaged and self-directed, but they often encounter passive, dependent, and grade-driven students. This workshop will highlight the importance of self-directed learning skills in achieving student outcomes that are meaningful and long-lasting. Many faculty bemoan the fact that students are not self-directed, yet they fail to see the role of their own courses in helping students cultivate lifelong skills. Carefully constructed classroom experiences, assignments, and syllabi can help students step into new roles as learners, and to see themselves as stakeholders in their own learning experiences. Presenters will share models, engage participants in self-reflection, and provide opportunities for attendees to create activities and assignments designed to build skills for lifelong learning. (Theme 3: Intentional Learning)

Getting started...

- How would you characterize a self-directed, lifelong learner in your discipline?

- What do you do to promote self-directed, lifelong learning in your course(s)?
What is self-directed learning (SDL)? - Definitions

Self-directed learning:
“In its broadest meaning, “self-directed learning” describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.” (Knowles, 1975: 18).


What is known about SDL “(a) individual learners can become empowered to take increasingly more responsibility for various decisions associated with the learning endeavor; (b) self-direction is best viewed as a continuum or characteristic that exists to some degree in every person and learning situation; (c) self-direction does not necessarily mean all learning will take place in isolation from others; (d) self-directed learners appear able to transfer learning, in terms of both knowledge and study skill, from one situation to another; (e) self-directed study can involve various activities and resources, such as self-guided reading, participation in study groups, internships, electronic dialogue, and reflective writing activities; (f) effective roles for teachers in self-directed learning are possible, such as dialogue with learners, securing resources, evaluating outcomes, and promoting critical thinking.”


“the degree of choice that learners have within an instructional situation.” “open-ended opposite of "dependent" learning.” (Grow, 1991: 128)

Dimensions of Self-Directed Learning:
1. Process of learning
   • Able to define what to learn, plan for, conduct the learning, evaluate resources, and assess own learning
2. Learning strategies
   • how students study and process information
3. Performance outcomes
   • independent learning behaviors that persist beyond graduation.


Role of students in self-directed learning – on becoming a self-directed learner:
“To become self-directed learners, students must learn to monitor and adjust their approaches to learning.” (Ambrose et al., 2010: 6).


Role of teacher in self-directed learning -- on cultivating self-directed learners:
“The teacher shifts from recitation to provocation, from telling to asking, and from instruction to guidance, teaching students to think and find out for themselves.” (Gibbons, 2003: 24).


Relationship to lifelong learning – see AAC&U Value Rubric
Curiosity – Initiative – Independence – Transfer – Reflection
**Staged Self-Directed Learning (SSDL) – Grow (1991)**


Figure 1. The Staged Self-Directed Learning Model (p. 129)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Student</th>
<th>Teacher</th>
<th>Examples</th>
<th>Learning and instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Dependent</td>
<td>Authority, Coach</td>
<td>Coaching with immediate feedback. Drill. Informational lecture. Overcoming deficiencies and resistance.</td>
<td>Teacher-centered; “teacher as expert” Students expect explicit directions on what to do, how to do it, and when. Teaching methods: formal lectures, highlight specific assignments.</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Interested</td>
<td>Motivator, Guide</td>
<td>Inspiring lecture plus guided discussion. Goal-setting and learning strategies.</td>
<td>Instructor provides direction and help. Encourage students to build their confidence and skills, recognize their styles of learning, and personal learning goals. Explain assignments, demo practices, supervise projects, provide feedback.</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Involved</td>
<td>Facilitator</td>
<td>Discussion facilitated by teacher who participates as equal. Seminar. Group projects.</td>
<td>Teacher participates in the learning experience. “Guide on the side” / facilitator of learning —goal to empower learners. Students learn more about how they learn. Assign open-ended, carefully-designed projects. Explicit criteria, checklists help learners monitor their own progress.</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Self-directed</td>
<td>Consultant, Delegator</td>
<td>Internship, dissertation, individual work or self-directed study-group.</td>
<td>Learner-centered, teacher as consultant Students able and willing to take responsibility for their learning. Exercise skills in time management, project management, goal-setting, self-evaluation, peer critique, information gathering, and use of educational resources.</td>
</tr>
</tbody>
</table>

**Reflections on the SSDL Model**

i. At which stage would you place your students? Why?

ii. Where do you position yourself as a teacher in the SSDL model? Why?
Self-Directed Learning – *Skills to nurture and practice*

- **Cycle of Self-Directed Learning** *(Ambrose et al., 2010)*

**Assess the task**

- Students recognize what they know – prior knowledge, and their skills

**Evaluate strengths and weaknesses**

- Students identify what they need to learn; what skills they will need to deploy and develop.

**Plan**

- Students plan their approach to learn independently. Identify time and resources need to complete the task

**Apply strategies and monitor performance**

- Students self-monitor, discontinue ineffective strategies; apply new strategies; refine the scope to accomplish the project.

**Reflect and adjust if needed**

- Students monitor/self-assess, and adjust their approach along the way.

**Strategies to help students engage in the cycle of SDL** *(Ambrose et al., 2010)*

**Assess the task at hand by:**

- Be more explicit with assignment objectives, explain “why” the assignment goals are important
- Share sample work, give students practice recognizing components they will be assessed on
- Check student understanding of the task, give feedback, and ask students to articulate the assignment goal and describe the steps they would take
- Provide performance criteria with an assignment *(e.g., checklist or performance rubric).*

**Evaluate own strengths and weaknesses:**

- Give students practice and feedback early on to help them develop more accurate awareness of their strengths and weaknesses.
- Identify the specific skills that questions and assignments target to raise student awareness.
- Provide opportunities for student to self-assess with emphasis on the importance of this type of activity *(e.g., practice exam and key).*

**Plan an appropriate approach:**

- Provide students with a plan and have them implement it *(e.g., interim deadlines or timeline for deliverables)* – model for students what a plan should look like and as they gain experience have them submit.
- Assign a task that focuses on planning *(e.g., ask students to plan a solution strategy for a set of problems that involved how they would solve each problem/the approach to take).*

**Apply strategies and monitor performance**

- Teach students to assess their work and identify errors
- Provide guidelines for assignments *(e.g., how long it should take to complete).*
- Have students assess their own work against a set of criteria provided
- Have student explain what they did and why – reflect on and annotate their work.
**Reflect and adjusting one’s approach**
- Require students to reflect on their performance and assess their own strengths and weaknesses
- Prompt students to self-reflect (e.g., exam wrapper strategy)
- Present students with different strategies to approach a task or problem.
- Create assignments that have students propose strategies, exploring the advantages and disadvantages of each.

**Beliefs about intelligence and learning**
- Address students’ beliefs about learning and discuss aspects over which they have control – their effort, concentration, study habits, level of engagement, etc.
- Explain the different levels of learning (recall different from knowing how and when to apply learning)
- Help students set realistic expectations

The SDL cycle presents key **metacognitive skills** that are critical to be an effective self-directed (self-regulated or lifelong) learner.

“To become self-directed learners, students must learn to assess the demands of the task, evaluate their own knowledge and skills, plan their approach, monitor their progress, and adjust their strategies as needed.” (Ambrose et al, 2010: 191) … unfortunately these metacognitive skills tend to fall outside the content area of most courses, and consequently they are often neglected in instruction.”

Ambrose et al. (2010) and Doyle (2008) highlight the importance of helping students develop metacognition – thinking about thinking, knowing “what we know” and “what we don’t know”, self-monitoring their learning.

**Strategies to promote metacognition:**

- **Modeling the metacognitive process**
  Demo your thinking process, how would you approach an assignment, problem, or task – walk students through the phases of your metacognitive process: talk aloud, assess strengths and weaknesses, share your action plan, articulate the steps you would take, and show how you would evaluate the end result.

- **Scaffolding students in their metacognitive processes**
  Early on provide support as students practice skills, and gradually remove them as students develop mastery


- **Consider having your students complete a survey about their learning styles preference or their self-assessment of their skills as a self-directed learner.**

Resources:
- The Self-Directed Learning Readiness Scale (SDLRS) also known as the Learning Preference Assessment (LPA) developed by Dr. Lucy Guglielmino in 1977 (http://www.lpasdlrs.com)
### Teaching Methods, Strategies, and Activities – *Instructional design focus on learner-centered methods*

<table>
<thead>
<tr>
<th>Syllabus</th>
<th>Classroom Experiences</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| - Include goals that integrate skill development with content acquisition  
- Communicate the importance of learning how to learn in the learning experience  
- Schedule time for students to engage in metacognitive activities  
- Pose course outcomes as questions for learners to investigate and answer  
- Articulate your role in facilitating learning and what students can expect  
- Provide students with choice and the opportunity to contribute to the learning goals  
- Involve learners in decision-making – what it to be learned, when, and how it should be learned, evaluated, and allow learners to pursue their own interests  
- Involve students in decision making (e.g., syllabus draft and involve students in its development in class | - Provide examples of acceptable work  
- Have students practice and apply their learning  
- Teaching inquiry skills, decision-making, personal development, self-evaluation  
- Model metacognitive processes (e.g., mapping out steps for an independent assignment)  
- Provide opportunities for students to raise their awareness of their learning styles and study habits  
- Scaffold student learning on large projects or new learning experiences.  
- Create a learning environment based on openness and trust  
- Have students identify what they know and what they don't know  
- Deliberately model your thinking process, have students do the same, and debrief  
- Engage students with active learning strategies | - Provide students with choice on their topic  
- For large independent project, stage the assignment, allow time for feedback and adjustment  
- Independent projects  
- Build in reflective component - Reflective learning journal  
- Have students submit a plan and timeline for their project  
- Portfolio development  
- Make learners aware of the objectives, learning strategies, resources, and evaluation criteria for an assignment  
- Activities and assignment decisions – give students authentic role in making decisions about their assignments within a framework you create (Weimer, 2002) |

In what ways can you modify your syllabus so that it cultivates self-directedness?  
What might you do to encourage self-directedness in your classroom?  
What type of authentic assignments would promote self-directed learning?
Self-Directed Learning by Design (SDLbD) – Focus on balance between what the teacher does and what the student does to make learning happen.

<table>
<thead>
<tr>
<th>You</th>
<th>Your Students</th>
</tr>
</thead>
</table>
| **1a. The context of learning**  
  What are your assumptions about your learners?  
  What needs and expectations do you think they bring to the task? | **1b. The context of learning**  
  What are your students’ strengths and weaknesses as learners? |
| **2b. Learning goal for an assignment or activity**  
  What will students be able to do with their knowledge? What skills will they develop? How will they demonstrate their understanding? | **2b. Learning goal**  
  What interests/motivates your students? |
| **3a. Teaching method(s) for the learning goal chosen above** that would develop student skills. | **3b. Learning Strategies** that students should utilize as they approach the assignment or activity |
| **4a. What will you be doing to promote SDL?**  
  What will you do to scaffold your students’ learning? | **4b. What will your students be doing?**  
  How will you get students involved/to take ownership of their learning? |
| **5b. How will you assess students?**  
  What feedback will you provide students to reinforce learning and help build students’ confidence? | **5b. What opportunities will students have to assess their learning?**  
  How will students intentionally reflect on their learning process and outcomes? |
| **6. How will you assess whether your effort to promote SDL was effective?**  
  What were the outcomes? What role did it play in student learning? What changes will you make for next time? Will you do it again or use a different active learning strategy? |


Resources


The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can be shared nationally through a common dialog and understanding of student success.

**Definition**

Lifelong learning is “all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence”. An endeavor of higher education is to prepare students to be this type of learner by developing specific dispositions and skills described in this rubric while in school. (From The European Commission. 2000. Commission staff working paper: A memorandum on lifelong learning. Retrieved September 3, 2003, www.see-educoop.net/education_in/pdf/lifelong-oth-enl-t02.pdf.)

**Framing Language**

This rubric is designed to assess the skills and dispositions involved in lifelong learning, which are curiosity, transfer, independence, initiative, and reflection. Assignments that encourage students to reflect on how they incorporated their lifelong learning skills into their work samples or collections of work by applying above skills and dispositions will provide the means for assessing those criteria. Work samples or collections of work tell what is known or can be done by students, while reflections tell what students think or feel or perceive. Reflection provides the evaluator with a much better understanding of who students are because through reflection students share how they feel about or make sense of their learning experiences. Reflection allows analysis and interpretation of the work samples or collections of work for the reader. Reflection also allows exploration of alternatives, the consideration of future plans, and provides evidence related to students’ growth and development. Perhaps the best fit for this rubric are those assignments that prompt the integration of experience beyond the classroom.
**FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING VALUE RUBRIC**

for more information, please contact value@aacu.org

**Definition**

Lifelong learning is “all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence”. An endeavor of higher education is to prepare students to be this type of learner by developing specific dispositions and skills (described in this rubric) while in school. (From The European Commission. 2000. Commission staff working paper: A memorandum on lifelong learning. Retrieved September 3, 2003, from www.see-educoop.net/education_in/pdf/lifelong-oth-enl-02.pdf.)

**Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.**

<table>
<thead>
<tr>
<th></th>
<th>Capstone</th>
<th>Milestones</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curiosity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explores a topic in depth, yielding a rich awareness and/or little-known information indicating intense interest in the subject.</td>
<td>Explores a topic in depth, yielding insight and/or information indicating interest in the subject.</td>
<td>Explores a topic with some evidence of depth, providing occasional insight and/or information indicating mild interest in the subject.</td>
<td>Explores a topic at a surface level, providing little insight and/or information beyond the very basic facts indicating low interest in the subject.</td>
</tr>
<tr>
<td><strong>Initiative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completes required work, generates and pursues opportunities to expand knowledge, skills, and abilities.</td>
<td>Completes required work, identifies and pursues opportunities to expand knowledge, skills, and abilities.</td>
<td>Completes required work and identifies opportunities to expand knowledge, skills, and abilities.</td>
<td>Completes required work.</td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational interests and pursuits exist and flourish outside classroom requirements. Knowledge and/or experiences are pursued independently.</td>
<td>Beyond classroom requirements, pursues substantial, additional knowledge and/or actively pursues independent educational experiences.</td>
<td>Beyond classroom requirements, pursues additional knowledge and/or shows interest in pursuing independent educational experiences.</td>
<td>Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently.</td>
</tr>
<tr>
<td><strong>Transfer</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes explicit references to previous learning and applies in an innovative (new and creative) way that knowledge and those skills to demonstrate comprehension and performance in novel situations.</td>
<td>Makes references to previous learning and shows evidence of applying that knowledge and those skills to demonstrate comprehension and performance in novel situations.</td>
<td>Makes references to previous learning and attempts to apply that knowledge and those skills to demonstrate comprehension and performance in novel situations.</td>
<td>Makes vague references to previous learning but does not apply knowledge and skills to demonstrate comprehension and performance in novel situations.</td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviews prior learning (past experiences inside and outside of the classroom) in depth to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time.</td>
<td>Reviews prior learning (past experiences inside and outside of the classroom) in depth, revealing fully clarified meanings or indicating broader perspectives about educational or life events.</td>
<td>Reviews prior learning (past experiences inside and outside of the classroom) with some depth, revealing slightly clarified meanings or indicating a somewhat broader perspectives about educational or life events.</td>
<td>Reviews prior learning (past experiences inside and outside of the classroom) at a surface level, without revealing clarified meaning or indicating a broader perspective about educational or life events.</td>
</tr>
</tbody>
</table>