THE K. PATRICIA CROSS ACADEMY

INSTRUCTOR'S GUIDE

Teaching Technique 19

Personal Learning Environment

ACTIVITY TYPE

- Reflecting
- Graphic Organizing
- Project Learning
- Learning Assessment

TEACHING PROBLEM ADDRESSED

- Low Motivation/Engagement
- Surface Learning

LEARNING TAXONOMIC LEVEL

- Caring
- Learning How to Learn
- Integration

Personal Learning Environment

A *Personal Learning Environment (PLE)* is a set of people and digital resources an individual can access for the specific intent of learning. Students illustrate the potential connections through a visible network of the set.

1 Clarify your teaching purpose and learning goals for the *PLE*

2 Establish the overall content or topic area of the *PLE*

3 Set assignment parameters (minimum number of nodes, connections, etc.)

4 Develop a plan for learning assessment or grading

5 Communicate assignment instructions to students through a handout

6 Allow students time to construct their *PLE*

7 Reflect upon the *PLE* activity and evaluate its effectiveness

Step-By-Step Instructions

In this section we provide you with guidance on each of the seven steps involved as you consider this technique.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

A *Personal Learning Environment* (*PLE*) is a reflecting and graphic organizing activity that helps students identify information sources–whether tools or individuals–that may help their development and growth in the future. A *PLE* provides students with a way to map their future connections and to let them understand that their learning environments can and should grow. Being intentional about the process of information gathering and curation can help learners to recognize and realize the process of life long and social learning. It can help them to understand that no matter where they are, there is always some source available from which they may seek the answers to questions or even to come up with new questions, which they document in an ever-expandable network. Because students are constructing a lifelong learning infrastructure, a *PLE* can be an empowering and transformational experience.

PLEs can be used to achieve a variety of teaching goals and learning outcomes, so think through how you want to use *PLEs* in your own course. Students may use their *PLEs* to learn from content area specialists, to learn about new technology, to find interesting new developments in their field, and so forth. While *PLEs* are typically done individually, this technique can be an effective group assignment by putting students into working groups and allowing them to create a Collaborative Learning Environment.

PLEs primarily address issues related to the Learning How to Learn domain of the Significant Learning Taxonomy. However, *PLEs* can also increase student engagement as they help students see how course content applies to future educational, professional, and personal contexts. This can increase the perceived value of course content and hence students' caring about the content and their motivation to learn it. *PLEs* are also a useful way to assess these learning domains, and we provide additional guidance on this in the **Support Materials** section of this document.

STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

A *PLE* is essentially a mind map of how an individual believes that he or she can learn in the future.

STEP 3: SET ASSIGNMENT PARAMETERS

In addition to determining assignment logistics such as *PLE* focus, amount of time students will have to com*p*lete their *PLEs*, and so forth, students will benefit from seeing a sample so that they have an idea of what one might look like. You can find examples on the Internet or you can create your own.

Below is a rudimentary example:

created using bubbl.us

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

Create a rubric that you can use to assess the completed *PLEs*. See **Support Materials** below for two sample rubrics. Determine who will be involved in the assessment. For example, having students peer review each other's work can provide an opportunity to learn from other students.

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

Because assignment instructions for a *PLE* are more effective if there is a sample *PLE*, it is best to create a handout.

STEP 6: IMPLEMENT THE TECHNIQUE

- Announce the activity and share an example of a *Personal Learning Environment* to serve as a model.

- Explain to students that they make the decisions when setting up a *PLE*, including:
    - o What tools will you use?
    - o Who will be in the network?
    - o What do you want to learn?
  Make it clear to students that the focus should be learning to learn in the subject area.

- Provide students with time to work.

- Collect and assess the *PLEs*.

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

When reflecting on the activity and how effective it was, consider the following questions:

- Did the technique match the course learning goals and objectives?

- Did it meet my goals for this learning module?

- Was it appropriate for the students?

- Did the technique keep the students engaged?

- Did it promote student learning?

- Did it provide me with information about student understanding?

If you answer yes to all or most of these questions, next consider how you might improve the activity for the next use.

Support Materials

The materials in this section are intended to help you with the process of implementing this technique. Because *Personal Learning Environments* yield rich data about student learning, for this technique, we provide additional guidance on assessment.

ASSESSMENT GUIDANCE

PLEs are effective ways to assess learning. The *Learning Artifact* is the network itself. It provides an illustration of a student's ability to obtain information from others in the future. It documents the current and future process of learning, rather than simply capturing evidence that learning has happened in a single snapshot in time.

This technique should involve the creation of a network that realizes extended study that goes on during a term. That is, students need exposure to course-related content and concepts to be familiar enough with the subject area to create a *PLE*. For that reason, a *PLE* is typically done toward the end of an academic term, and it has been used by some as a final course (or even program) experience.

SAMPLE ASSESSMENT RUBRICS

We offer two sample rubrics on the following pages, which you can expand and tailor to your own needs.

PERSONAL LEARNING ENVIRONMENT
ASSESSMENT RUBRIC

CONTENT	• Breadth of Resources • Depth of Resources • Number of nodes and ties	4 3 2 1
ORGANIZATION	• Clarity of ties • Betweenness (connection clusters)	4 3 2 1
TOOLS	• Content gathering (e.g. digital notebook; RSS readers) • Social bookmarks • Blogs • Internet search tools	4 3 2 1
PURPOSIVENESS	• Focus of resources • Likelihood of resources serving the stated purpose	4 3 2 1
AESTHETICS	• Professional appearance • Clean appearance	4 3 2 1
MECHANICS	• Standard spelling • Accuracy of names of tools	4 3 2 1

Name _____ **Total Points** _____ /24 (Potential)

PERSONAL LEARNING ENVIRONMENT ASSESSMENT RUBRIC
Adapted From The AAC&U Integrative Learning, Information Literacy, and Lifelong Learning VALUE Rubrics

This rubric combines elements of the Integrative Learning, the Information Literacy and the Skills for Lifelong Learning VALUE Rubrics created by faculty working with AAC&U. Integrative learning is defined as an understanding and a disposition that a student builds across the curriculum and cocurriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus. Information Literacy is defined as the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. Lifelong learning is defined as any "all purposeful learning activity undertaken on an ongoing basis with the aim of improving knowledge, skills and competence." *Evaluators will assign a zero to any assignment that does not meet benchmark/acceptable (cell one) level performance.*

	EXCELLENT 19–20	VERY GOOD 17–18	GOOD 15–16	ACCEPTABLE 13–214	POINTS
BREADTH & DEPTH OF RESOURCES OF LEARNING	Chooses an excellent variety of learning resources appropriate to the assignment. Selects resources after considering the importance of the multiple criteria used (such as variety of print and internet sources, personal network, and relevance to project focus.)	Chooses a very good variety of learning resources appropriate to the assignment. Selects resources after considering the importance of the multiple criteria used (such as variety of print and internet sources, personal network, and relevance to project focus.	Chooses a good variety of learning resources appropriate to the assignment. Selects resources after considering the importance of the multiple criteria used (such as variety of print and internet sources, personal network, and relevance to project focus.	Chooses a few learning resources using limited criteria (such as only Internet sources).	____/20
WHOLENESS & CONNECTIONS TO COURSE CONTENT	The PLE graphic depicts an excellent, engaging whole out of the multiple resources in ways that clearly address the specific PLE focus.	The PLE graphic depicts a very good whole out of the multiple resources in ways that clearly address the specific PLE focus.	The PLE graphic depicts a good whole out of the multiple resources in ways that clearly address the specific PLE focus.	The PLE graphic depicts partially or with limited resources the specific PLE focus.	____/20
INTEGRATED COMMUNICATION TO EFFECTIVELY ACCOMPLISH THE ASSIGNMENT'S PURPOSE	Fulfills the assignment by choosing a format, language, appropriate visual representations, and general layout **in ways that engage and enhance meaning**, making clear the interdependence of format, language, and visual representation.	Fulfills the assignment by choosing a format, language, appropriate visual representations, and general layout) **to explicitly connect content and form**, demonstrating awareness of purpose and audience.	Fulfills the assignment by choosing a format, language, or graph (or other visual representation) that **connects in a basic way** what is being communicated (content) with how it is said (form).	Fulfills the assignment in **an appropriate form**.	____/20
TRANSFER	Makes excellent, explicit references to previous learning and applies in an innovative (new and creative) way to demonstrate comprehension and performance in the novel situation of the PLE assignment.	Makes very good references to previous learning and applies in an innovative (new and creative) way to demonstrate comprehension and performance in the novel situation of the PLE assignment.	Makes good references to previous learning and applies in an innovative (new and creative) way to demonstrate comprehension and performance in the novel situation of the PLE assignment.	Makes vague references to previous learning but does not apply knowledge and skills to demonstrate comprehension and performance in the novel situation of the PLE assignment.	____/20
REFLECTION & SELF-ASSESSMENT	In Pre- and Post Project Reflections, demonstrates a deep sense of self as a learner, building on prior experiences to respond to new and changing.	In Pre- and Post-Project Reflections, demonstrates very good sense of self as a learner.	In Pre- and Post-Project Reflections, demonstrates good sense of self as a learner.	In Pre- and Post-Project Reflections, demonstrates developing sense of self as a learner.	____/20

Name _____

Total Points _____ /100 (Potential)

Online Adaptation

This section is intended to help you with the process of implementing and assessing *Personal Learning Environment* in your online class.

HOW TO GET STARTED

- Have students build a list of information sources—both people and digital resources—that correspond with a course topic.

- Provide students with sample *PLEs* to give them an idea of what they look like.

  › An internet search for "examples of personal learning environments" provides ample resources you can use.

- Students can:

  › Write out their resource list and then take a picture.

  › Use the art tool in their word-processing program.

  › Use online tools to create their own visual displays.

- Then, have students submit their *PLE* and explanation as an assignment in your Learning Management System.

- If appropriate for the topic, create a way for students to share with their peers in a discussion forum or synchronous videoconference session.

Technique Template

Following are two templates to assist you as you think through how you might implement this technique in your own class. The first is a completed template, providing an example of how Elizabeth Barkley adapted *Personal Learning Environment* in her course, *Music of Multicultural America.* The second is a blank template for you to fill out to tailor this technique for your course.

Technique Template

Sample *Personal Learning Environment* Completed Technique Template:
Content from Elizabeth Barkley

Music of Multicultural America
Course Name

COURSE CHARACTERISTICS

What are the situational factors that impact this course? For example, is it on campus or online?
How many students? Is it lower division or graduate? Are there student attributes such as attitudes,
prior knowledge, reasons for enrolling, and so forth that should be taken into account as you
consider this technique?

> My course is an on campus, Honors Institute section of a
> lower division General Education course. The course meets my
> institution's United States Cultures & Communities requirement and
> also the Humanities requirement. It enrolls about 25-30 students.
> A significant number are international students. We are also trying
> to recruit more first generation students. Honors students typically
> have good academic skills and are highly motivated.

STEP 1: CLARIFY YOUR TEACHING PURPOSE AND LEARNING GOALS

Why are you choosing this technique? What do you hope to accomplish?

> I am looking for an activity that will help support the course's
> metacognition student learning outcome. This outcome states that
> by the end of the course, a successful learner will demonstrate
> self-managed learning in a comprehensive journal in which they
> reflect upon, evaluate, and describe their own learning process.
> The PLE will be a component of this journal.

STEP 2: IDENTIFY THE LEARNING TASK'S UNDERLYING PROBLEM AND PROMPT

What is the question you want learners to address, or problem you want them to solve?

I will instruct students to create a PLE in which they illustrate both the human and digital resources they can use to be successful in college.

STEP 3: SET ASSIGNMENT PARAMETERS

What are the assignment logistics? For example, will this be assigned individually or is it group work? How long will the assignment take? Will students be submitting a product? What materials, resources, or additional information do you anticipate needing?

This will be an individual assignment, and students will be given 6 weeks to complete it. They can use graphic software or word processing software to create the visual nodes and connections. I will also incorporate a pre- and post-reflection essay. I also need to develop one myself so that I can use it as a model for students.

STEP 4: DEVELOP A PLAN FOR LEARNING ASSESSMENT OR GRADING

If you decide to assess learning, how will you determine that learning has occurred? For example, will you use a simple +/check/- grading system? If you use a rubric, will you use an existing one or create one? What will be your criteria and standards?

I will adapt the AAC&U VALUE rubrics for Lifelong Learning and also Integrative Learning, and use the criteria of breadth/depth of resources, wholeness/connections to course content, integrated communication, transfer, and reflection/self-assessment.
My standards will include Excellent, Very Good, Good, Acceptable, and the potential of a "0" if the Journal does not meet the acceptable benchmark.

STEP 5: COMMUNICATE ASSIGNMENT PARAMETERS TO STUDENTS

How will you communicate assignment parameters to students? For example, through a handout? A prompt on a presentation slide? Assignment instructions in your online course?

I will create a handout that I will distribute in class and also post in the course's Learning Management System. I will also set aside some time in class to discuss the project with students and answer questions.

STEP 6: IMPLEMENT THE TECHNIQUE

How will you adapt steps/procedures for your students? Are there any additional logistical aspects to consider?

I will create a handout that I will distribute in class and also post in the course's Learning Management System. I will also set aside some time in class to discuss the project with students and answer questions.

STEP 7: REFLECT UPON THE ACTIVITY AND EVALUATE ITS EFFECTIVENESS

Note: This step will be completed after you have implemented the technique.
Did this technique help you accomplish your goals? What worked well? What could have been improved? What might you change if you decide to implement the activity again?

After I implemented this technique, I decided not to use it again. This is because it was fairly time intensive for students, and the "metacognition" learning outcome has lower priority for me than other outcomes that are more directly content related. Therefore, I will use the pre- and post-reflection essays I have integrated into the Background Knowledge Probes, Digital Stories, and Contemporary Issues to assess the metacognition outcome so that students can focus their time on these projects instead.

Technique Template

This template is intended for use when planning to implement **Personal Learning Environment** in your class. Fill in the blanks below, and use the information provided elsewhere in the Instructor's Guide to assist you in your thinking.


Course Name

COURSE CHARACTERISTICS

What are the situational factors that impact this course? For example, is it on campus or online? How many students? Is it lower division or graduate? Are there student attributes such as attitudes, prior knowledge, reasons for enrolling, and so forth that should be taken into account as you consider this technique?

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Why are you choosing this technique? What do you hope to accomplish?

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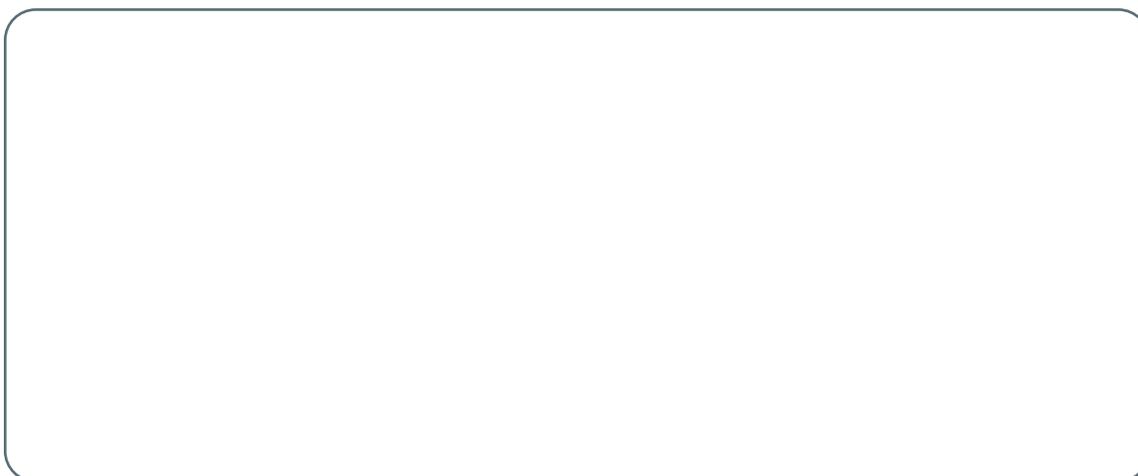
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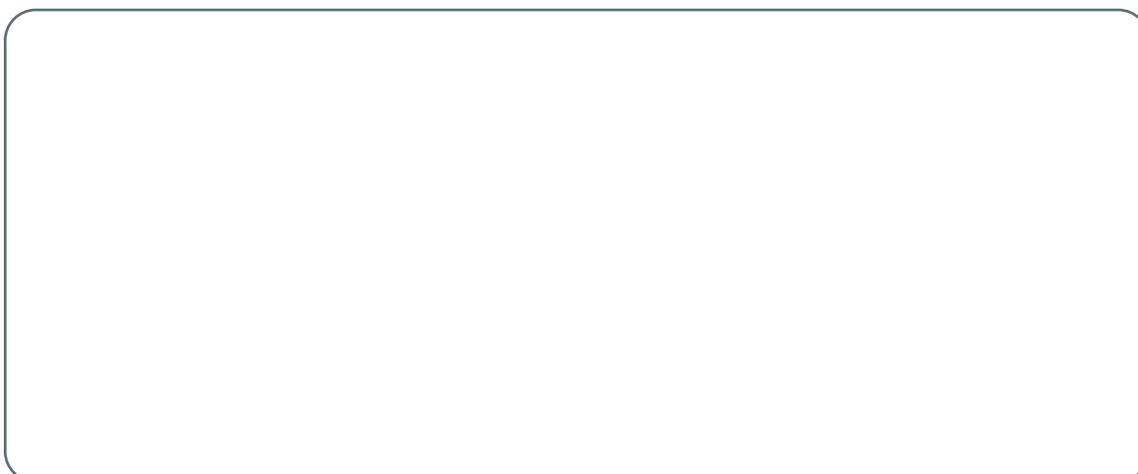
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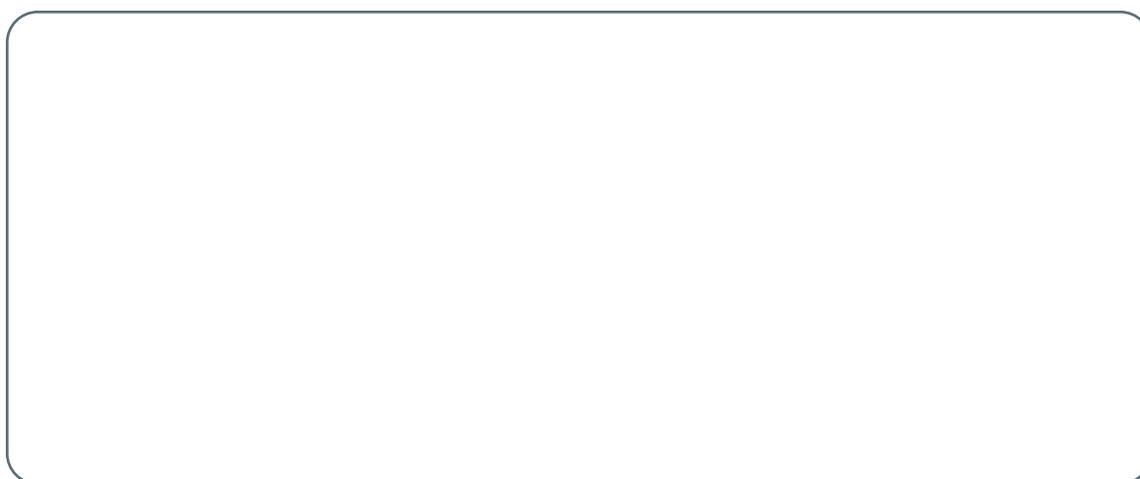
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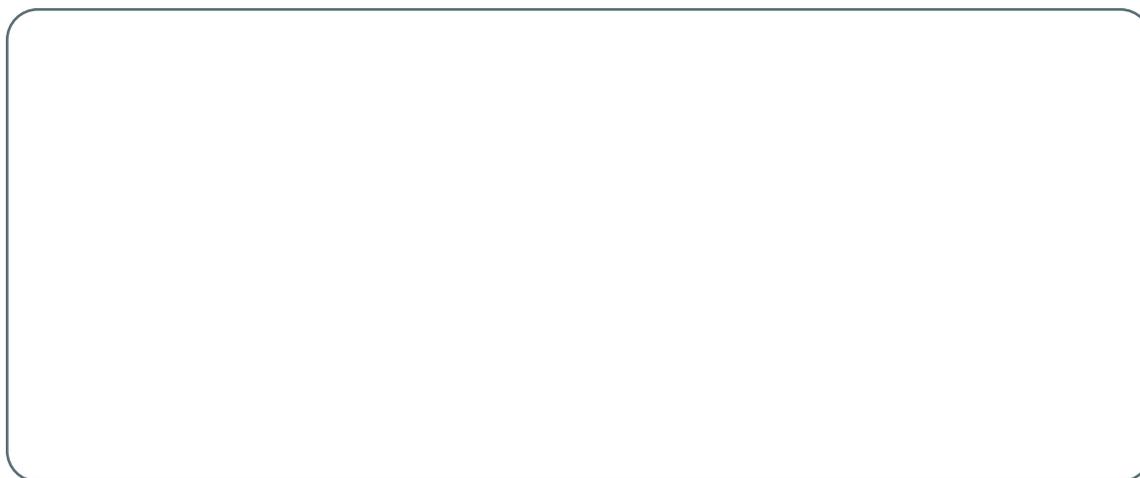
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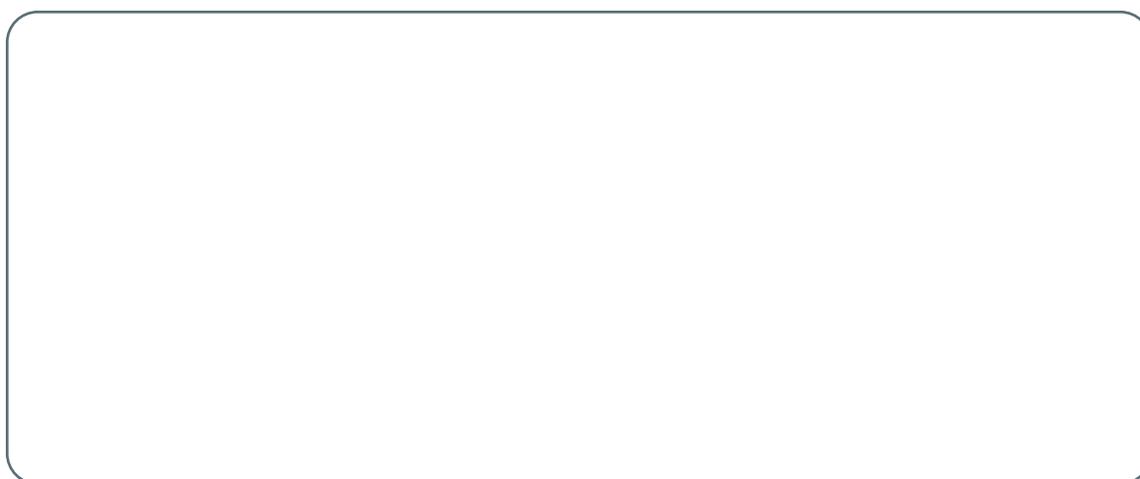
References and Resources

PRIMARY SOURCE

Content for this download was drawn primarily from "Learning Assessment Technique 50: Personal Learning Environment" in *Learning Assessment Techniques: A Handbook for College Faculty* (Barkley & Major, 2016), pp. 399–404. It includes material that was adapted or reproduced with permission. For further information about this technique, including examples in both on campus and online courses, see the primary source:

Barkley, E. F., Major, C. H. (2016). *Learning Assessment Techniques: A Handbook for College Faculty*. San Francisco, CA: Jossey-Bass.

CITATIONS AND ADDITIONAL SUGGESTIONS FOR FURTHER READING

- Martindale, Trey; Michael Dowdy (2010). "Personal Learning Environments." In George Veletsianos. Emerging Technologies in Distance Education. Athabasca University Press. pp. 177–193.

- Drexler, W. (2010). The networked student model for construction of personal learning environments: Balancing teacher control and student autonomy Australasian Journal of Educational Technology 26(3), 369–385. http://www.ascilite.org.au/ajet/ajet26/drexler.pdf

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