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**Self-Directed Learning Project**

**Abstract**

This project encompasses researching self-directed learning competencies and methods that can be used by instructors to teach, aid, and help transition a student or by an individual to become a better self-directed learner. This paper points out the organization of self-directed competencies that are characteristics of self-directed learners. It covers how a student or an individual person can self diagnose his or her own learning needs to identify self-directed learning competencies and to determine a methodology to integrate self-directed learning methods into a learning session.

**What is self-directed learning?**

The idea of self-directed learning can be confusing to students and other individuals who are interested in having more self-direction when they are learning. Some people think that being a self-directed might mean that he or she does not have any contact with other people or that an individual has to perform all educational preparation and learning tasks before starting a course of study. And while it is true that according to Brockett & Hiemstra (1991) that “self-directed learners are people who take the primary responsibility for planning, carrying out and evaluating their own learning endeavors” a student or an individual can be helped by others during a course of study.

Brockett & Hiemstra (1991) goes on to state:

Most adults spend a considerable time acquiring information and learning new skills. The rapidity of change, the continuous creation of new knowledge, and an ever-widening access to information make such acquisitions necessary. Much of this learning takes place at the learner's initiative, even if available through formal settings. A common label given to such activity is self-directed learning. In essence, self-directed learning is seen as any study form in which individuals have primary responsibility for planning, implementing, and even evaluating the effort. Most people, when asked, will proclaim a preference for assuming such responsibility whenever possible.

## **What are Characteristic Behaviors of Self-Directed Learning?**

Several things that are known about self-directed learning and are noted in Hiemstra (1994). He published a list of them about self-directed learning in T. Husen & T. N. Postlethwaite (Eds.), *The International Encyclopedia of Education* (second edition), Oxford: Pergamon Press. Behavioral characteristics for self-directed learning starts with the individual. Self-directed learning is a trait that exists to some extent in every person and for every learning situation. Self-directed learners have learning agility and are able to transfer learning into terms of knowledge and study skill from one situation to another.

Taking the discussion to the next level, Hiemstra clarified that self-directed learning does not always mean that all learning will take place away from others.

Although self-directed study can involve self-guided reading and reflective writing activities, it can also include participation in study groups, internships, and electronic dialogs. Teachers can have a role in self-directed learning in such activities as dialogues with learners, securing resources, evaluating outcomes, and promoting critical thinking.

Teachers can help empower learners to take responsibility for what a learner choose to learn. Hiemstra concludes that some educational institutions find ways to support self-directed study through “open-learning programs, individualized study options, non-traditional course offerings, and other innovative programs.” (Hiemstra 1994).

## **Self-directed Learning Competencies**

Part of this project was to develop a list of self-directed competencies and related skills. The following list shows the competencies or skills that a learner requires to become involved in a self-directed learning project. When looking at each of these competencies ask yourself these questions:

To what degree does this competency describe my learning behavior?  
Do I need to strengthen this area of learning before moving on the next competency?  
(Adapted from Knowles, M. S. (1975). Self-directed learning. Chicago: Follett.)

### **Be Curious**

- The ability to develop and be in touch with your own curiosities. Perhaps another way of describing this skill would be "the ability to engage in divergent thinking."

### **Ask and Formulate Questions**

- The ability to formulate questions, based on your personal curiosities, that is answerable through inquiry.

### **See Yourself Objectively**

- The ability to perceive yourself objectively and accept feedback from others about personal performance non-defensively.

### **Self-Diagnosis Learning Needs**

- The ability to diagnose your own learning needs in light of models of competence required for performing life roles.

### **Identify Learning Resources**

- The ability to identify human, material, and experiential resources for accomplishing various kinds of learning objectives.

### **Recognize Answers to Questions**

- The ability to identify data required to answer various kinds of questions.

### **Know How to Research**

- The ability to locate the most relevant and reliable sources of any required or acquired data.

### **Collect Data Efficiently**

- The ability to select and use the most efficient means for collecting any required data from various sources.

**Review Data**

- The ability to organize, analyze, and evaluate data so as to get valid answers to questions.

**Plan Your Learning**

- The ability to design a plan of strategies for making use of appropriate learning resources in answering questions or meeting learning needs.

**Implement Your Learning**

- The ability to carry out a learning plan systematically and sequentially. This skill denotes the ability to engage in convergent thinking. This is thinking that brings together information focused on solving a problems.

**Verify What You Have Learned**

- The ability to collect evidence that learning objectives have been met and have this evidence validated through subsequent performance.

Source: <http://home.twcny.rr.com/hiemstra/sdlcompetence.html>

## Taking Stock of Your Self-directed Learning

### Strategy and Steps for Self Diagnosis and for Planning Self-directed Learning.

#### 1. Before beginning a project, find or create a list of competencies to guide you.

Think of this as your learning goals. When you have achieved your list of competencies, it will show that you have mastered the subject. The main idea is to locate or create a self-diagnosis tool that appears to cover a range of behaviors or competencies associated with your topic or subject. Sometimes it is not possible to do this alone! If that is the case, then you will need to find a mentor, subject matter expert (SME), or learning partner or a combination of these options. (<http://www-distance.syr.edu/selfdiagnose.html>, 2007)

Figure 1: Master Competencies Chart for Self Diagnosis

Potential Content Area
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.

**2. Identify your *learning needs*: a self diagnosis.**

This is accomplished by being honest with yourself. One way to accomplish this is to use the supplied learning needs self-diagnosis tool to guide you. In this self-diagnosis process, you are attempting to find out what you currently know about the topic. You fill out the form with the Master competencies. Then choose one of four options about each competency. The choices are:

- (DK)** Do not know anything about this competency.
- (LO)** You have low amount of competency on this topic.
- (MD)** You have medium amount of competency on this topic.
- (HI)** You have high amount of competency on this topic.

Figure 2: Learning Needs Self-Diagnosis Chart

Learning Needs Diagnostic Form	DK	LO	MD	HI
1.	.	.	.	.
2.	.	.	.	.
3.	.	.	.	.
4.	.	.	.	.
5.	.	.	.	.
6.	.	.	.	.
7.	.	.	.	.
8.	.	.	.	.
9.	.	.	.	.
10.	.	.	.	.
11.	.	.	.	.
12.	.	.	.	.
13.	.	.	.	.
14.	.	.	.	.
15.	.	.	.	.
16.	.	.	.	.
17.	.	.	.	.
18.	.	.	.	.

The Learning Needs Diagnostic Form is designed to assist you in assessing your level of competence and the need related to a potential course and its content.

Source : <http://home.twcny.rr.com/hiemstra/selfdiagnose.html>

### 3. Create a Competency Model of your current understanding of the subject.

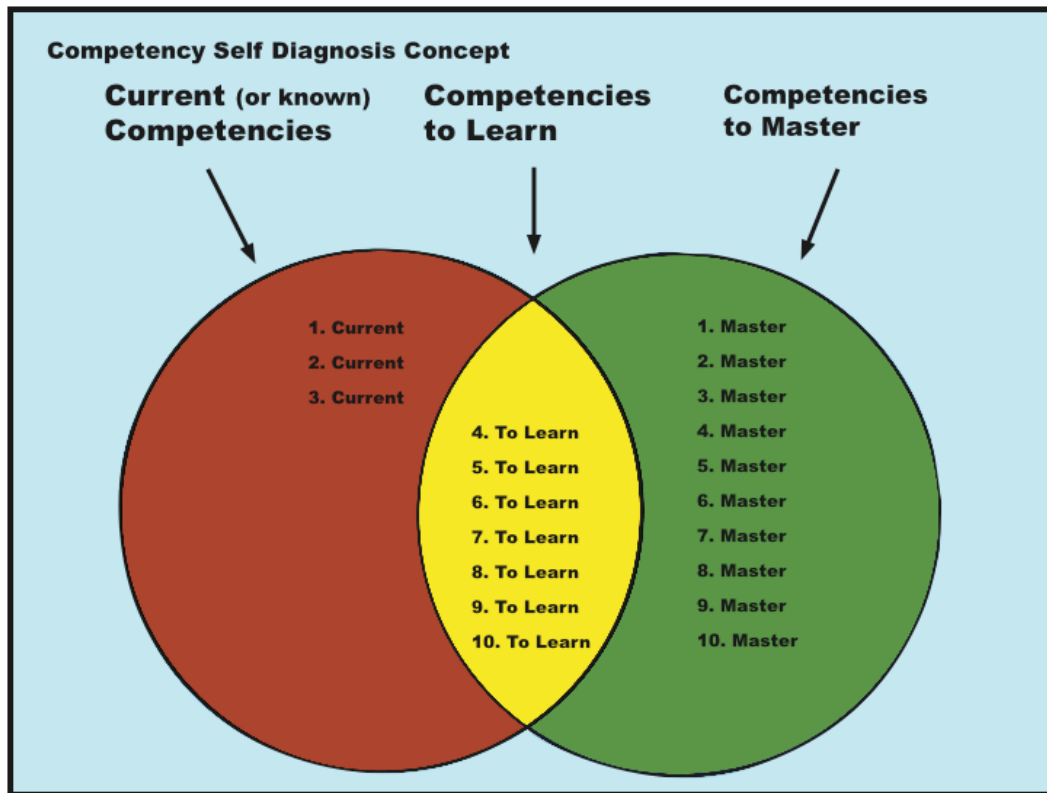
Using this approach allows you to know where you are now and where you want to be. This allow you to understand what you currently know about a topic. Then compare it to the master competency model.

If there is a competency model available that aligns with your learning needs, use that to get started. If not, enlist help from friends, colleagues, supervisors, and SME's to create you own list of competencies.

### 4. Create and compare your current to master competencies.

After creating your specific competency model, use this model and the master competency model to assess the learning needs gap between where you are now and where the model indicates you should be in regard to each of the competencies you wish to master.

Figure of process figure 4:



Source: <http://home.twcny.rr.com/hiemstra/selfdiagnose.html>

**5. Use some form of a planning tool as way to model, or format and design a series of learning activities.**

This approach will enable you to categorize each of the various gaps you have identified. A custom-designed learning contract is often used for such planning efforts. To get an idea of what this planning tool might look like, see figure 4. (Brockett & Hiemstra, 1991)

Figure 4. Blank Learning Contract Example

Learning Contract Form

**Learner:** \_\_\_\_\_ **Course:** \_\_\_\_\_ **Instructor:** \_\_\_\_\_ **Contract Grade:** \_\_\_\_\_

What are you going to learn (objectives)	How are you going to learn it (resources/strategies)	Target date for completion	How are you going to know that you learned it (evidence)	How are you going to prove you learned (verification)

Source: <http://home.twcnv.rr.com/hiemstra/contract.html>

Figure 5. Learning Contract Example:

<b>Learner: Jane Smith</b>		<b>Topic: Distance Education</b>		<b>Mentor: Dr. Joe Adams</b>	
What are you going to learn (objectives)	How are you going to learn it (resources/strategies)	Target date for completion	How are you going to know that you learned it (evidence)	How are you going to prove you learned (verification)	
Improve my general knowledge of distance education	<ol style="list-style-type: none"> <li>1. Actively seek out books and web sites pertaining to distance education and complete some overview reading to obtain a general idea of the topic</li> <li>2. Talk with my work colleagues and ask them to give me feedback on my learning strategies</li> <li>3. Complete this Learning Contract</li> </ol>	<ol style="list-style-type: none"> <li>1. By the end of May</li> <li>2. By June 15</li> <li>3. By July 1</li> </ol>	<p>Self perceptions about an initial understanding of distance education</p> <p>An annotated bibliography of those resource I uncover in this initial effort</p> <p>A learning contract that has been examined by at least one of my colleagues and assessed as making sense, doable, and appropriate</p>	<p>Ask Dr. Adams, who agreed to be my mentor, to examine my learning contract and provide me feedback</p> <p>The design of all contract tasks completed</p>	
Acquire an understanding about distance education and its uses	<ol style="list-style-type: none"> <li>1. Read at least two books and several web articles related to distance education</li> <li>2. Talk with my work colleagues about how I think distance education could be used in our workplace</li> </ol>	<ol style="list-style-type: none"> <li>1. By August 1</li> <li>2. By August 15</li> </ol>	<p>Complete a reading log that summarizes my understanding and that includes some reflections on how distance education could be used</p>	<p>Ask Dr. Adams and some work colleagues for feedback</p>	
Improve my ability to acquire knowledge about accessing information electronically	<ol style="list-style-type: none"> <li>1. Participate in one or more web-based chat room discussions about using the Internet to obtain information</li> <li>2. Practice searching and downloading information that I find from the Internet</li> </ol>	<ol style="list-style-type: none"> <li>1. By September 15</li> <li>2. By September 15</li> </ol>	<p>A brief report that describes the listserves I joined and my part in them plus some sample copies of downloaded materials</p>	<p>Ask both Dr. Adams and several work colleagues for feedback on my involvement and its potential for my work</p>	
Enhance my skills at using distance education by facilitating some Computer Mediated Conversations (CMC) with various work colleagues	<ol style="list-style-type: none"> <li>1. Read at least 1 book related to CMC</li> <li>2. Participate in some training offered by the local community college on how to effectively use CMC as a training tool and then use it with my work colleagues to train them about downloading information from the Internet</li> </ol>	<ol style="list-style-type: none"> <li>1. By the end of September</li> <li>2. By the end of October</li> </ol>	<p>Written report of my findings including implementation plan</p> <p>Make 1-hr. presentation to my work colleagues regarding CMC and its potential</p>	<p>Ask my supervisor for some feedback</p>	

Source: <http://www-distance.syr.edu/selfdiagnose.html>

**6. Specify your learning objectives.**

The areas or topics you wish to learn about.

**7. Next, specify learning resources and strategies.** Use the second column (resources and strategies) to propose how the objectives will be achieved. The resources you plan to use can be materials such as books, videos, Compact Disks, on-line tools, or human support options.

**8. State the target dates for completion.** Use realistic dates, unless there are mandated guidelines or other deadlines.

**9. Specify evidence of that you mastered the objects and accomplished learning the subject.** These should align with the competencies to be mastered.

**10. Specify how the evidence will be validated or judged according to the type of objective.**

**11. After you have specified judgment criteria, indicate how to verify the evidence according to the criteria.**

**12. Review your learning contract with consultants or advisors.** As a way to validate if the contract is indeed worthwhile, here are some questions to consider asking about the contract that help to verify if the contract will produce the optimal result:

- Do the learning objectives describe what you propose to learn?
- Are the learning objectives clear, understandable, and realistic?
- Are other objectives you might consider?
- Do the learning strategies and resources seem reasonable, appropriate, and efficient?
- Are there other resources and strategies you might consider?
- Does the evidence seem relevant to the various objectives and would it convince others?
- Is there any other evidence you might consider?
- Are the criteria and means for validating the evidence clear, relevant, and convincing?
- Are there other ways to validate the evidence that you might consider?

Source: (Brockett & Hiemstra, 1991).

## Planning Self-directed Learning - Getting Started

In planning for the initiation and facilitation of self-directed learning activities, take into account that guidance is often missing for self-directed learners.

An interesting model that was suggested by Stubblefield (1981) has four phases. The idea is to use this model as a way to ask questions during the planning process.

- The first phase is about initiating. It involves focusing on needs, objectives, and benefits from the learning activity.
- The second phase concerns planning. This phase involves identifying learning resources, specifying learning activities, and establishing criteria for successful accomplishments.
- The third phase, management, involves carrying out the learning activities, analyzing the information obtained, and recording progress toward some personal changes.
- The fourth phase is about evaluation. It should answer questions about whether or not objectives were achieved and where to go from this point.

Figure 6. Guiding Model

Table 6.1 Guiding Model, or Plan, for Self-Directed Learning

<i>Initiating Phase</i>	<i>Planning Phase</i>	<i>Managing Phase</i>	<i>Evaluating Phase</i>
What is the purpose or goal of the learning endeavor?	What questions are to be answered or what needs met?	What are the intended outcomes or personal benefits?	What learning resources are available or attainable?
What activities can best stimulate learning?	What are the criteria for successful accomplishment of any learning goals?	Has each learning activity been carried out?	How can the acquired information and knowledge be analyzed, interpreted, and incorporated?
What conclusions or personal change is obtainable from the experience?	Were the learning goals achieved?	Are there other goals that can be established?	How can personal proficiencies as a learner be improved?

Source: Stubblefield (1981)

## **Teacher Plans for Self-directed Learning**

Next, teachers and facilitators need to get focused on planning and understanding the role of a teacher. The next section points out the role of a teacher and facilitator for promoting self-direction in learning. (Brockett & Hiemstra 1991). The teacher or facilitator should:

- Provide guidance and information on certain self-directed topics through lecturing and the use of other classroom learning methods.
- Become a resource for individuals or for a small groups during certain portions of a learning project.
- Encourage the goal setting of learning objectives and ensuring they can be met.
- Assist learners to assess their needs and competencies so each person can map out an individual learning path.
- Provide samples of previously done work as well as feedback on current projects based of each person's learning contract.
- Make resources or new information about subjects that were identified through learning needs assessment process.
- Build a collection of information, media, and models to be a resource for related topics or areas of study.
- Develop learning resources based on learning contacts. This might include subject matter experts who can offer special topics and create positive learning experiences for individual self-directed learners or and small groups that are outside normal larger groups learning sessions.
- Help stimulate learners outside the formal classroom by listening or mentoring.
- Help learners develop a good attitude and approach about how learning cultivates independence.
- Encourage and promote individual or group discussions that stimulate interest in the learning experience.
- Be sure the teacher engages in creating a positive learning environment and that learners develop a positive attitude toward learning and self-directed inquiry.
- Help learners develop and manage a learning process that offers a continuous diagnosis of needs, acquisition of continuous feedback, and keeps the learner involved.

- Serve as a person who validates or evaluate a learners success during and at the conclusion of a learning experience. (Brockett & Hiemstra 1991).

### **Initial planning**

The teacher's next phase is to plan for activities that will take place prior to the first session that involves developing a class or training session. This includes:

- Finding out what the students are interested in.
- Developing reasons why the learner will be interested in the learning and their experiences.
- Defining and specifying necessary competencies, learning requirements, and goals of students.
- Ensuring the course covers those topics included in any catalog description, marketing materials etc.
- Creating a needs assessment.  
The first technique involves written responses by learners to a needs assessment tool. The second technique involves learners in some small group discussions in which each person's needs can be contrasted with others in the group.
- Identifying clear personal needs and, discover previously unrecognized needs.
- Finding, building, designing, and developing relevant support materials for the class. This is hard work to develop, but it places the teacher more in a facilitator role and encouragers learners to be more self-directed.
- Using workbooks or study guides as supplemental materials. This includes “course syllabus materials, descriptions of learning activities, bibliographic citations, learning contract forms, any necessary descriptions or instructions, and special materials that will be useful to learners.” (Brockett & Hiemstra, 1991).

## **Teaching Environment / Climate Setting**

Creating a positive learning environment is important for the learner's success.

Ensure the classroom has enough space to accommodate space for break-out areas for group discussion, that the room temperature is comfortable, lighting is adequate, and any audio-visual equipment is in place and working.

Not only should the classroom location be comfortable, but the learning environment should encourage learners to have positive social and psychological experience. Also, the teacher needs to ensure that he or she is approachable so that the students feel comfortable asking questions. Additionally the teacher should encourage learners to participate in peer-to-peer interactions.

## **Needs Assessment**

Adult learners should become actively involved and take ownership in determining his or her specific needs. Getting learners involved and taking ownership usually takes happens at the beginning of the first session because learning activities for them are planned.

### *Individual Needs Assessment*

As this research points out, students need to be assessed to find out about gaps in their learning abilities in regard to specific competencies. This can be done by using the supplied Learning Needs Diagnostics tool or some other appropriate instrument.

The purpose of this is to build and instill personal ownership for learning through a process that involves self-recognition of strengths and weaknesses. It is important to ask learners to honestly look at and assess their needs. This is a practical way to avoid guessing about what a learner requires.

### *Group Activities*

It is also important to involve participants by dividing them into small groups. Splitting up a class into groups of five to eight people, then having them select a leader and a note taker will help them report later on the group's activities. This arrangement provides interactivity and permits informal learning. It also allows them to experience working with peers and to struggle with communication of terms, to clarify certain subjects, and to develop skills for working with others.

## Implementing Self-Directed Learning

Implementing a clear and meaningful plan means assessing the student's competencies, then putting a flexible learning plan into action and monitoring its progress.

- After students' competencies are assessed, the instructor needs to create a tentative group plan for the remainder of the course. This is done by compiling and examining what the majority of needs are for the group and then estimating the amount of time that is required to cover each topic. It might also involve using or developing various resources.  
Keep in mind to take a careful look at any course requirements to see how closely the requirements match each of the student's learning needs information.
- Try to match all of the student's overall needs to individual needs. This is a skill instructors learn through experience. This approach allows students to master the subject and then move on to the next level.
- Next, the instructor has to start creating detailed activities for future class sessions. This involves being sure all of the right resources are available to complement and supplement each group of learners.
- The teaching plan is shown to the learners for a final review and approval during the next meeting. This is a tentative plan. It is presented based on the class meeting schedule. It "suggests appropriate support materials and objectives, and highlights any required course deadlines." (Brockett & Heimstra 1991). The reason for a tentative schedule is to be flexible and provide "slack time so particular topics can be explored in depth as interest dictates, and that time is allotted for what reflective activity." (Danis and Tremblay (1985).
- Next, the instructor tries to bring about a logical way to make the class flow. This includes "securing the necessary resources, arranging for any guest presenters, communicating the class plan to learners, and re-diagnosing learner needs whenever it is deemed necessary." (Brockett & Heimstra 1991).
- The learners then develop a learning plan or contract through which they design an individualized approach to meeting identified needs. See figure 4.
- One of the instructor's roles is to provide feedback and help ensure that a meaningful and realistic plan for the course is completed. Throughout the course learners are urged to engage in group activities based on their learning plan. Since students all have different learning styles, some learners will participate in every remaining session while others will only contribute in selected group activities. Learners may even use time away from a session to pursue individual learning activities. (Brockett & Heimstra 1991).

- For the remainder of a course, the instructor takes on two roles. One is to manage the remaining class sessions in such a manner as to promote both learning and involvement. A conscious effort should be made to promote critical reflection by learners. (Brookfield's (1987). This role of the instructor helps bridge the intricacies of managing a process so that class logistics and details do not get in the way of learners. Reflective thinking will help promote thinking, theory building, and intellectual transformation.

A second role of an instructor involves: one-to-one communication with learners through written feedback and individual appointments, renegotiation of learning plans as needs evolve, assistance in securing learning resources, and evaluation of any products developed. Arranging course meetings will vary depending on how frequently or infrequently, the class is scheduled to meet. (Brockett & Heimstra 1991).

### **Evaluation Activities**

There are many reasons for evaluations that include:

- A report to the student about his or her performance during the class.
- Indication to what degree a student's job performance has improved.
- Verification the class objectives did in fact agree with the instruction.
- Verification the student understood the instruction and learning activities.
- Verification the student's gained knowledge on that subject

There are a number of ways to assess a student from written, verbal, to skills testing.

Brockett & Heimstra (1991) point out that there are "three means of evaluation during a graduate course to help keep the teaching fresh and to provide indications about how well the self-directed learning process is working for participants.

- One involves formative evaluation throughout the course. This includes being sensitive to non-verbal cues of problems, soliciting written feedback occasionally, employing a mid-course evaluation tool, and encouraging appointments outside of class as concerns or problems arise.
- Another technique is to use an instrument that is designed to evaluate instructors and facilitators of self-directed learning.
- The third technique is another instrument also administered at the end of the course. This instrument seeks evaluation of the process used, content covered, and resources employed during the course. (Brockett & Heimstra 1991).

## **Summary**

The purpose of this research project was to work in a self-directed way and to learn more about the subject of self-directed learning. In the course of this project, I found that the research materials provided a wealth of information about the subject of self-directed learning. In terms of meeting the project's learning objectives and goals, this paper covers the topics of defining and organizing self-directed learning competencies. This includes: How an individual person can self diagnose his or her own learning needs to identify self-directed learning competencies. The paper shows steps about how to integrate self-directed learning methods into a learning session. Lastly, the scope of the topic is much larger than anticipated. During this research, I collected a tremendous amount of information and reported on what was found. What this also calls for is continued research that allows for more in-depth analysis and subsequent learning.

## Other Related Topics

### Habits to Differentiate Good From Poor Listening

Entered by Carter McNamara, MBA, PhD

This information is from "How to Be a Better Listener" by Sherman K. Okum, *Nation's Business*, August 1975, and from "Building a Professional Image: Improving Listening Behavior" by Philip Morgan and Kent Baker, *Supervisory Management*, November 1995

Only about 25 percent of listeners grasp the central ideas in communications. To improve listening skills, consider the following:

Poor Listener	Effective Listener
tends to "wool-gather" with slow speakers	thinks and mentally summarizes, weighs the evidence, listens between the lines to tones of voice and evidence
subject is dry so tunes out speaker	finds what's in it for me
distracted easily	fight distractions, sees past bad communication habits, knows how to concentrate
takes intensive notes, but the more notes taken, the less value; has only one way to take notes	has 2-3 ways to take notes and organize important information
is overstimulated, tends to seek and enter into arguments	doesn't judge until comprehension is complete
inexperienced in listening to difficult material; has usually sought light, recreational materials	uses "heavier" materials to regularly exercise the mind
lets deaf spots or blind words catch his or her attention	interpret color words, and doesn't get hung up on them
shows no energy output	holds eye contact and helps speaker along by showing an active body state
judges delivery -- tunes out	judges content, skips over delivery errors
listens for facts	listens for central ideas

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