COLLECTING INFORMATION ON STUDENTS

The reality of our classrooms is that students learn and interact in unique ways. What engages or intrigues some students does not capture the interest of others. Various experts assure us that we all have distinct preferences about how and what we learn and that we process information differently. As we think about our students, we need to consider a variety of traits: learning profiles, interests, readiness, and affect. The more we know about our students, the more likely we are to capture and hold their interest. When students are motivated because we are providing choice of how to gain knowledge and how to process the new information they perform better. It is our job to find out what motivates learners. When we offer and support a variety of pathways for learning we enhance the potential for students to learn more effectively and efficiently. Knowing as much about them as possible makes this possible.

Learning profiles, including gender, culture, intelligences, and learning styles, inform us how students learn best. The research on the impact of gender on learning and school smart behavior supports the need to attend to differing needs for movement, variety of tasks and stimulation. (cec.sped.org, Gender Differences Impact Learning and Post-school Success, 12/11/08). Knowledge of and sensitivity to the ethnic, regional, familial and socio-economic culture requires observation and conversations with parents and students to understand family roles and relationships, what is valued in their culture, and the impact of language differences.

“Kidwatching” can be a productive means of gathering information. Checklists, questionnaires and inventories provide insight into preferences. Asking parents to “tell me about your child” provides valuable information and builds relationships. It is a simple question that can be asked face to face, via email, or through a note home. Students at the secondary level can address the question, “What helps you to be successful in school?” or “What can I do to make this a great learning year for you?” Continue to gather information informally throughout the year.

All good teachers respond to students’ readiness, the knowledge, understanding and skills related to learning. Readiness is impacted by cognitive proficiency as well as earlier school and life experiences and attitudes about school and learning. Responding to students’ readiness requires thoughtful pre- and on-going assessment to determine what level of difficulty of learning experiences will provide for moderately challenge.

The social and emotional dispositions can trump readiness. What do you know about your students’ time outside the classroom: loner versus social butterfly, bully versus running scared, security and safety of home setting, who has the child’s back, does the child eat nutritionally most of the time, are there productive outside interests/activities? Knowing the students well encourages us to pay attention to their emotional needs.
### FIGURE 2.1
Some Categories of Student Variance with Contributors and Implications for Learning

<table>
<thead>
<tr>
<th>Category of Student Variance</th>
<th>Contributors to the Category</th>
<th>Some Implications for Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>Gender, Neurological “wiring” for learning, Abilities, Disabilities, Development</td>
<td>High ability and disability exist in a whole range of endeavors. Students will learn in different modes. Students will learn on different timetables. Some parameters for learning are somewhat defined, but are malleable with appropriate context and support.</td>
</tr>
<tr>
<td>Degree of privilege</td>
<td>Economic status, Race, Culture, Support system, Language, Experience</td>
<td>Students from low economic backgrounds, and representing races, cultures, and languages not in positions of power, face greater school challenges. Quality of students’ adult support system influences learning. Breadth/depth of student experience influence learning.</td>
</tr>
<tr>
<td>Positioning for learning</td>
<td>Adult models, Trust, Self-concept, Motivation, Temperament, Interpersonal skills</td>
<td>Parents who actively commend education positively affect their children’s learning. Trust, positive self-concept, positive temperament, and motivation to learn positively impact student learning. Positive interpersonal skills and “emotional intelligence” positively impact student learning.</td>
</tr>
<tr>
<td>Preferences</td>
<td>Interests, Learning preferences, Preferences for individuals</td>
<td>Student interests will vary across topics and subjects. Students will vary in preference for how to take in and demonstrate knowledge. Students will relate to teachers differently.</td>
</tr>
</tbody>
</table>
Information Gathering

How do you like to learn?

1. Do you like quiet or noise (music, TV...) when you study?  Quiet    Noise
2. Where do you prefer to work on assignments (on the floor, at a desk, on a computer...)
3. If you are not able to complete something, is it because
   You forgot?  It's boring?  You got distracted?  You need help?
4. Where do you like to sit in class?
   Near the door  In the front  In the back  By a wall  By a window
5. Do you like to work with a partner?  Why or why not?
6. When are you most alert?  In the afternoon?  In the morning?  In the evening?
7. What classes do you enjoy most and why?
8. Describe how you study.  Where, when how...
9. If you have an assignment due in two weeks, how do you plan to make sure it is completed on time?
10. If something is new to you, do you:  Like to have it explained?  Like to read about it?
    Like to just try it?  Like to watch a DVD/demonstration?

Self-Reflection

Students respond in journals, as exit card probes, in small group discussions, on a graffiti wall......

1. If I could do anything, I’d.....
2. Usually, when I have free time, I.....
3. My hobbies are......
4. At school I like to....
5. The types of things we do in class I really like are......
6. I get bored in class when......
7. I wish my teachers would.....
8. I am uncomfortable when people ask me to......
9. Do you like to work alone or in a group?  Why?
10. School would be better if.....
LEARNER SURVEY

Directions: In each section, check the statements that apply to you. Leave the others blank.

Section A

1. ___ If I need to spell a word correctly, I write it down to see if it "looks" right.
2. ___ I can remember names if I see them written on nametags.
3. ___ I enjoy reading books and looking at the pictures.
4. ___ I would prefer to read the directions or look at the illustrations before beginning a project.
5. ___ To remember what my teacher says in class, it helps me to take notes.
6. ___ I usually write down all of my assignments to help me remember them.
7. ___ A good way for me to practice vocabulary words would be to use flashcards.
8. ___ I like my desk and locker to be organized.
9. ___ I can sit still to watch TV or work on the computer for a long time.
10. ___ I understand things better when I read them than when I listen to them.
11. ___ I like for my folks to make a list of the chores I need to do rather than just tell me.
12. ___ I can picture things easily in my mind.

Section B

1. ___ If I hear someone's name, I remember it easily.
2. ___ I prefer to listen to a book on tape rather than read it myself.
3. ___ I can pay attention and remember easily when my teacher reads aloud to us.
4. ___ I use jingles and songs to help me memorize things.
5. ___ If I were lost, I would stop and ask someone for directions rather than look at a map.
6. ___ In reading, I can best remember a story if we have a class discussion about it.
7. ___ I remember songs after hearing them only a couple of times.
8. ___ I often read and study by repeating information aloud to myself.
9. ___ I am distracted by background noise (like pencil tapping) when I am taking a test.
10. ___ I like to study for tests by having someone quiz me aloud.
11. ___ I like to talk and listen.
12. ___ I work math story problems by talking through them aloud.
Section C

1. ___ It is hard for me to pay attention when I must sit still for a whole class period.
2. ___ I enjoy sports and being active.
3. ___ I count on my fingers or with other objects when I do math problems.
4. ___ My favorite classes are those where I can move around a lot.
5. ___ I would almost always choose to play outside rather than sit inside and read a book or listen to tapes.
6. ___ I have a hard time staying neat and organized.
7. ___ I am good at skills like walking on a balance beam, serving a volleyball or playing ping-pong.
8. ___ I prefer to learn a new activity by being shown how to do it rather than reading about it or listening to a tape about it.
9. ___ I would like to act out stories rather than talk about them.
10. ___ I have a good sense of balance and rhythm.
11. ___ I can learn new dance steps or athletic skills after only trying them a few times.
12. ___ I would like to study my multiplication tables by saying them in rhythm while I jumped rope.

TOTAL NUMBER OF CHECKS IN SECTION A __
TOTAL NUMBER OF CHECKS IN SECTION B __
TOTAL NUMBER OF CHECKS IN SECTION C __

A. If your highest total is in section A, you are likely a SEEING learner. You remember best by using your eyes.

B. If your highest total is in section B, you are likely a HEARING learner. You remember best by using your ears.

C. If your highest total is in section C, you are likely a DOING learner. You need movement or activity while you study to remember best.

I am strongest as a ______________________ learner.

My second area of strength is as a ______________________ learner.
We are encouraged to understand how our own brain prefers sensory input either from **visual, auditory** or **kinesthetic** sensations. We all operate in all three modalities, but we tend to prefer one or two.

<table>
<thead>
<tr>
<th>Modality</th>
<th>Some Characteristics</th>
</tr>
</thead>
</table>
| **Visual** | Neat and tidy  
Speak quickly  
Good planning and organisation  
Observant especially of environmental detail  
Appearance-orientated in dress and presentation  
Good speller – can see the words in your mind  
Remember what has been seen rather than heard  
Memorise by visual association  
Not distracted by noise  
May forget verbal instructions  
Good, fast readers  
Prefer reading to being read to  
Make doodles during conversations  
Forget to relay messages  
Sometimes can’t find the right words |
| **Auditory** | Learn by listening  
Speak in rhythmic patterns  
Talk to yourself  
Easily distracted by noise  
Move their lips and say the words as they read  
Enjoy reading aloud  
Good at repeating music  
Better at telling than writing down  
Eloquent speakers  
Talkative and enjoy discussions  
Can spell out loud rather than writing down |

If you prefer this modality, you tend to process information better when it is supplied in the form of pictures, diagrams, graphs and so on. You probably say ‘I see’ or ‘I get the picture’, when you are at workshops or other learning environments. Visual people like handouts and often take good notes with ‘mind maps’ of ideas and little diagrams.
Kinesthetic

Kinesthetic people learn by hands on activities and working within groups. You will probably catch yourself building models or moving objects around as you explain abstract concepts.

Learn by manipulating
Want to act things out
Speak slowly
Touch people to get attention
Stand close when talking to someone
Are physically orientated and gesticulate
Memorise by walking and seeing
Can’t sit still!
Can’t remember geographical location unless they’ve been there
Use action words
Like books with a strong plot
Use body actions as they’re reading
May have messy handwriting
Enjoy involved games
What's Your Motivation Style?

Understanding what motivates you is key to understanding how you learn — and it shouldn't surprise you to realize that we're all motivated in different ways. Likewise, you can't motivate anyone else. All you can do is invite them to learn. Some people learn in order to achieve a certain goal. Others learn because they love learning, and others learn for the pleasure they get from meeting other people in learning situations. In order to learn how to take action, it's helpful to learn what motivates you.

Whether you're a goal-oriented, learning-oriented, or socially-oriented, it's helpful to recognize your unique motivational style so that you can identify the types of situations that will best satisfy your needs.

Most people are somewhat fluid in their motivation. The best way to represent motivation style is with three circles that overlap. At times, you might like being part of a social set, even if your primary style is learning-oriented. Likewise, you might go wholeheartedly after a goal even if you're primary motivation is social. In fact, many of us have had to learn how to be goal-oriented because our society places such a premium on meeting goals. But when tested, the general population is divided pretty evenly between those who are goal-oriented, socially-oriented, or learning-oriented learners.

Below is an assessment you can use to determine your motivation style.

1. Read each task listed in the left-hand column.
2. Circle one description from the three choices to the right that best matches how you usually handle each task.
3. Count the number of highlighted items in each column.
4. Write your total at the bottom of each column.
5. Remember that these questions don't have right or wrong answers — your answers offer insight about how you are motivated.

<table>
<thead>
<tr>
<th>I'm proud when I ...</th>
<th>Get things done</th>
<th>Help others</th>
<th>Think things though</th>
</tr>
</thead>
<tbody>
<tr>
<td>I mostly think about</td>
<td>What's next</td>
<td>People</td>
<td>Ideas</td>
</tr>
<tr>
<td>To relax, I tend to</td>
<td>Do whatever it</td>
<td>Hang out and talk with friends.</td>
<td>Read, surf the Web to learn new things.</td>
</tr>
<tr>
<td>I like to do things ...</td>
<td>takes to accomplish relaxation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When online, I like to ...</td>
<td>Now, or on a schedule</td>
<td>When it works for everyone</td>
<td>When it feels right to me</td>
</tr>
<tr>
<td>Projects should be ...</td>
<td>Search and retrieve</td>
<td>Write emails or chat</td>
<td>Look around and linger.</td>
</tr>
<tr>
<td>In school, I liked to</td>
<td>Ask a lot of questions</td>
<td>Make friends</td>
<td>Explore</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>Schedules</td>
<td>Are necessary</td>
<td>Help you coordinate with people</td>
<td>Are a useful tool</td>
</tr>
<tr>
<td>I like to be recognized for ...</td>
<td>Being organized, neat, productive, efficient, and punctual.</td>
<td>Noticing others, being kind, fair, thoughtful, and considerate.</td>
<td>Being clever and smart, making discoveries, and solving problems.</td>
</tr>
<tr>
<td>In terms of completing things ...</td>
<td>I finish what I start.</td>
<td>I like to enlist the help of others.</td>
<td>Life is a journey, not a destination.</td>
</tr>
</tbody>
</table>

The column with the highest total represents your primary motivation style. The column with the second most is your auxiliary motivation style. You are likely to be motivated most in one area with some overlap in a second.

Your primary motivation style: ____________________________

Your auxiliary motivation style: ____________________________

**If you're a Goal-oriented learner**, you're likely to reach for your goal through most any means necessary. You seek the clearest path, which might lead you straight toward your computer or to an expert in the field.

**If you're a Socially-oriented learner**, you take part in learning mainly because of the social contact you meet and interact with people learn things in the process. You don't like independent learning at all, because it doesn't give you the core experience that you crave.

**If you're a Learning-oriented learner**, the experience of learning itself drives you. You seek knowledge for its own sake, and are easily frustrated by programs that require you to spend more time on procedure and process than on actual learning.

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Pre-assessing Learning Profile

Samples: Pre-assessing Learning Profile
         How Do You Like to Learn? (Elementary Level)
         Sternberg Learning Profile Survey

Tool: My Learning Profile Survey

Learning profile encompasses a range of student preferences—from physical workspace arrangements and assignment preferences to learning styles and preferred intelligences. Here are several sample pre-assessments that focus on learning profile. Use the tool to design a survey that will provide useful information about your students’ learning preferences.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>The longest I can pay attention to a lecture before needing a break is 5 minutes.</td>
<td></td>
</tr>
<tr>
<td>The longest I can pay attention to a lecture before needing a break is 10 minutes.</td>
<td></td>
</tr>
<tr>
<td>The longest I can pay attention to a lecture before needing a break is 15 minutes.</td>
<td></td>
</tr>
<tr>
<td>The longest I can pay attention to a lecture before needing a break is 20 minutes.</td>
<td></td>
</tr>
<tr>
<td>The longest I can pay attention to a lecture before needing a break is 30 minutes or more.</td>
<td></td>
</tr>
<tr>
<td>It helps me to take notes when I listen to a lecture.</td>
<td></td>
</tr>
<tr>
<td>Taking notes distracts me from paying attention to a lecture.</td>
<td></td>
</tr>
</tbody>
</table>

Comments (things I do or the teacher can do to help me concentrate longer, exceptions, how strongly I feel about this, etc.):

<table>
<thead>
<tr>
<th>Statement</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>When my teacher gives an assignment, I like to have exact steps for completing it.</td>
<td></td>
</tr>
<tr>
<td>When my teacher gives an assignment, I like to create my own steps for completing it.</td>
<td></td>
</tr>
<tr>
<td>When my teacher gives a long-term assignment, I need lots of check-in points—one per day or several per week.</td>
<td></td>
</tr>
<tr>
<td>When my teacher gives a long-term assignment, I need check-in points at least once per week.</td>
<td></td>
</tr>
<tr>
<td>When my teacher gives a long-term assignment, I need occasional check-in points—every couple of weeks, for example.</td>
<td></td>
</tr>
<tr>
<td>When my teacher gives a long-term assignment, I don't need check-in points at all. I will get it done on my own.</td>
<td></td>
</tr>
</tbody>
</table>

Comments (exceptions, how strongly I feel about this, etc.):
Section: Pre-assessing General Readiness, Interest, and Learning Profile

How Do You Like to Learn? (Elementary Level)

Depending on your students' grade level, you may wish to ask fewer questions. If so, focus on the areas for which you feel you will be most likely to offer differentiated options.

Directions: Draw the smiley face that matches the way you feel about each of the things in the list.

😊 = I love this! Please let me do this as often as possible!
😊 = I like this OK. I'll be happy to do it.
😊 = I don't really like this, but it's OK once in awhile.
😊 = I hate this. Please don't make me do it unless you really have to!

1. Work alone
2. Work with a partner
3. Sing
4. Draw pictures
5. Write a story
6. Act out a story
7. Tell a story
STERNBERG’S INTELLIGENCES

CREATIVE

<table>
<thead>
<tr>
<th>Innovator</th>
<th>Outside the box</th>
<th>What if</th>
<th>Improver</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Find a new way to show _____________________________.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use humor to show _____________________________.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use unusual materials to explain _____________________________.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explain (show) a newer and better way to _____________________________.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PRACTICAL

<table>
<thead>
<tr>
<th>Street Smart</th>
<th>Contextual</th>
<th>Focused on Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate how someone uses_________________________ in his /her line of work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on your experience, explain how____________________________ can be used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show how we could apply_____________________________ to solve this real life problem:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANALYTICAL

<table>
<thead>
<tr>
<th>Linear</th>
<th>Schoolhouse Smart</th>
<th>Sequential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show the parts of _______________________ and how they work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explain why______________________ works the way it does.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present a step by step approach to __________________________.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagram how______________________ effects __________________.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GARDINER’S INTELLIGENCES

☐ Logical/Mathematical
☐ Verbal Linguistic
☐ Visual/Spatial
☐ Kinesthetic
☐ Musical
☐ Naturalist
☐ Intrapersonal
☐ Interpersonal

Sternberg’s Intelligences
Indiana CAI
Center on Education & Lifelong Learning
Intelligence preference is one facet of a student's learning profile. The work of Robert Sternberg (Sternberg & Grigorenko, 2000) supports the presence of three intelligences: analytical, creative, and practical. While all people have and use all three intelligences, they tend to prefer one or two of them. Learning activities based on Sternberg's work ask all students to work with the same essential learning goals but to do so in a mode based on the learner's intelligence strengths or preferences. This approach is likely to make learning more efficient and effective. The following examples illustrate ways of identifying students' preferred intelligences.

**Short Quiz 1**

Imagine you are walking past a newsstand and notice the cover of a new magazine called *Inventions Today*. You are intrigued by the headline describing a new product, so you buy the magazine. What will you do next?

- Read the article carefully so that you can understand all of the details involved in designing the product.
- Read the article to find out how the product is being used.
- Read the article and think of ways to alter or improve the product.

Students who choose the first question indicate a preference for analytical thinking; the second, practical thinking; and the third, creative thinking.

**Short Quiz 2**

Which of the following sets of verbs MOST appeals to you?

- analyze, judge, critique, compare, contrast, evaluate, diagram, identify, explain, present a step-by-step approach, assess
- invent, discover, imagine, suppose, design, predict, find a new way, use unusual materials, promote, encourage, develop
- implement, apply, use, demonstrate, teach, put into practice, convince, show how, employ, make practical

Students who pick the first set probably prefer analytical thinking; students who pick the second set probably prefer creative thinking; and students who pick the third set probably prefer practical thinking.
### Practical

- Taking things apart and fixing them
- Learning through hands-on activities
- Making and maintaining friends
- Understanding and respecting others
- Putting into practice things I learned
- Resolving conflicts
- Advising my friends on their problems
- Convincing someone to do something
- Learning by interacting with others
- Applying my knowledge
- Working and being with others
- Adapting to new situations


### Directions:
Add up the number of statements you marked in each section above. The intelligence that you checked the most frequently is likely your intelligence preference. Remember, however, that your preferred intelligence may change over time and depending on the context.

<table>
<thead>
<tr>
<th>Number of Checks for Analytical Intelligence</th>
<th>Number of Checks for Creative Intelligence</th>
<th>Number of Checks for Practical Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: This assessment does not give you good information about how intelligent you are in each area, but it should give you an idea of your relative strengths or preferences.
Physical or environmental preferences (e.g., quiet versus talking or music; working while seated at a desk, on the floor, or standing):

Preferred level of structure for assignments (e.g., open-ended or step-by-step directions):

Intelligence preferences (e.g., Sternberg or Gardner):

Other questions: