A significant factor in teacher education and pedagogy research is the ability to behaviorally identify teaching styles—to reliably distinguish one teaching style from another. Because different learning conditions are created by using different teaching styles, it is imperative that there is congruence between the proposed or intended, teaching style(s) and the actual teaching style(s) used or implemented. Two factors affecting the quality of pedagogical research are: (1) the fidelity between intent and action and (2) the tools used to validate the independent variable (teaching style).

We have found that too frequently research using the Spectrum of Teaching Styles has not validated the fidelity between the teaching behavior and the delineated theory being studied. Additionally, some research has used invalid tools to identify or verify the teaching styles(s) used. An invalid tool ambiguously describes teaching style(s) (classroom images). That means the individual style descriptions inadvertently embrace multiple teaching images rather than just one exclusive teaching-learning image. Consequently, research results from such studies are either suspect or, in many cases, inaccurate. When conducting research, each style description must be singular in its image and mutually exclusive of other teaching style possibilities.

After years of working with the Spectrum and trying to distill the essence of each style to a short description, we have produced our latest version. The purpose of the following inventory is to provide unambiguous teaching descriptions that most closely capture the individual image of each landmark teaching style along the Spectrum. These
descriptions can be used in Spectrum classes to verify that the intended styles are actually used and to verify a *descriptive degree of fidelity* to which each style is implemented. In the non-Spectrum classrooms this tool can be used to identify which teaching style(s) are used by matching the classroom behavior to the most appropriate similar description.

In summary these descriptions can be used for different purposes: for observational purposes—to match which styles are implemented in the classroom; for learning purposes—to engage in self-study to determine one’s professional range of teaching style(s) and to determine one’s *descriptive degree of fidelity* when implementing each style; and for research purposes.

In each purpose, the descriptions can be diagnostic in that a teacher or researcher can examine the teaching-learning experience and identify various key features within the style descriptions that were accurately included and identify features that were omitted (by default or deliberately). Each description is only an abbreviation of the Spectrum theory; however, the descriptions do provide a mutually exclusive image with the essential factors of the different teaching styles.

The most important factor in creating alternative and deliberate teaching experiences is the understanding of the chain of decisions that are made by the teacher and the learner. These style descriptions omit detailing the underlying set of decisions made by the teacher and the set of decisions made by the learner. It is the specific decision structure for the teacher and learners that delineates, that creates the different styles; that determines the learning objectives; and that ultimately determines the fidelity of the experience to one’s intent. These style descriptions focus only on the overt image in the classroom.
Learning to See which teaching style is in focus and being able to see the factors and decisions within each style takes study, practice, and time. If research is to advance our profession then we need analysis procedures that are consist and reliable. The ability to deliberately and reliably distinguish one teaching and learning style from another is critical for the advancement of teaching and learning in the classroom.

The following tool is available for your use (please properly reference). Various versions of this tool have been used in many Spectrum and non-Spectrum situations over the years. We invite you to use it and to offer us comments and suggestions.

This tool was refined in 2007 with the collaborative assistance of Brendan SueSue, a doctoral student from The Queensland University of Technology (QUT) in Australia, and his advisor Dr. Ken Edwards. Brendan’s doctoral study (Teaching Styles and the Queensland Senior Physical Education Program. An Analysis Using Mosston & Ashworth’s Spectrum) examined classroom teaching styles using the Spectrum theory to distinguish one behavior from another. (Ashworth, S., SueSue, B., & Edwards, K. (2007). Descriptions of landmark teaching styles: A spectrum inventory. (USA & Australia).

A word of caution when designing investigative tools:

When designing classroom behavior descriptions it is best to avoid ambiguous terminology that can lead to confusion or misinterpretation. The following are a few examples of ambiguous terminology or statements that are not theoretically accurate.

AVOID the following statements:

- The teacher demonstrates… reason: in many classroom situations the teacher may not demonstrate the task but a learner may or there may be no demonstration at all. What is important in each styles is who is supposed to select the content—the teacher or the learner?

If an action is delineated, it must be an action that is essential to the structure of the style—such as: the teacher selects or designs the different levels of difficulty for the practice; or the teacher prepares the criteria; or the teacher provides private
feedback; or the learners work individually and privately; or the learner produces alternative (not recalled) designs. If descriptions, which define who does what in the classroom, are omitted the accurate selection of the style is compromised.

- **Discovery styles improve skill performance**… reason: the discovery styles do not (and cannot) focus on skill performance or improvement. Skills indicate a set model/procedure (how to do something) and skill improvement results from practice of the model/the procedures. The various reproduction styles (A-E) provide variety and diversity in the way learners can practice skills and content that needs to be reproduced, replicated, and remembered with accuracy.

- **Discovery engages divergent thinking**… reason: Each discovery style embraces a “different discovery thinking structure.” Discovery thinking can be convergent or divergent; it can be guided or unguided; it can focus on known content (yet unknown to the student) or it can focus on the production of new content. Content that is appropriate for Guided and Convergent Discovery episodes focus on principles, concepts, rules, relationships within the subject matter. Content appropriate for Divergent Discovery could be almost any facet of a subject matter that is not fixed to one image. Every field relies on its “fixed” content to establish its foundation and each field relies on the production of new content to continue its growth and relevance in the field. These two cognitive paths (convergent/divergent) are not in opposition to each other but rather in cooperation. Note: memory thinking can also be convergent or divergent, it can be guided or unguided; and its content can be new, review or a practice of known information.

- **The teacher will act as a facilitator**… reason: the word facilitator is ambiguous and has multiple meanings; therefore, each reader will personally produce a different interaction image for this word. There is no fixed definition or image for the word facilitator. In reality the teacher is a facilitator in all styles. The teacher’s decision expectations within each style actually define the kind of facilitator the teacher will be per style.
**Descriptions of Landmark Teaching Styles:**
**A Spectrum Inventory**

**Part 2: Style Descriptions Inventory**

_The following descriptions offer images of the classroom that represent different landmark teaching-learning expectations and each expectation inherently promotes a set of decisions and different sets of learning objectives in content and human behavior. Thus, each description represents a different teaching-learning style (O-T-L-O)._

<table>
<thead>
<tr>
<th>Spectrum Landmark Style Name</th>
<th>Classroom Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The image provided represents the following landmark style</strong></td>
<td>The following five teaching-learning styles promote reproduction cognitive operations while engaged in the task. The content in these styles may be <em>new</em> to the learner or the content may be <em>review</em> or <em>practice</em> or <em>test</em> of previously experienced content.</td>
</tr>
<tr>
<td><strong>Command Style-A</strong></td>
<td>The teacher selects the task that the students perform in a unison, choreographed or precision performance image following the exact pacing and rhythm (cues) set by the teacher.</td>
</tr>
<tr>
<td><strong>Practice Style-B</strong></td>
<td>The teacher selects the subject matter tasks, the quantity, and the time limits so that students can practice individually and privately. The teacher circulates among all students and offers private feedback.</td>
</tr>
<tr>
<td><strong>Reciprocal Style-C</strong></td>
<td>The teacher selects the subject matter tasks and presents the expectations for students to work with a partner. One student (the doer) practices the task, while the other student (the observer) uses a teacher prepared criteria (checklist) to offer immediate feedback focusing on performance clarification to the doer. When the first set of tasks are finished, the students switch roles and continue to the second* set of tasks. This experience offers practice in giving and receiving immediate feedback about the task and practice in developing comparing, contrasting, communicating, and social skills. <em>In physical or manipulative tasks, both practice tasks will frequently be the same.</em></td>
</tr>
<tr>
<td><strong>Self-Check Style-D</strong></td>
<td>The teacher selects the subject matter tasks and designs the criteria sheet (performance checklist) for the students. Students individually practice the tasks and check their own performance using the checklist. The teacher privately communicates with students to listen to their self-assessment comments and either reinforces the learner’s use of the criteria or redirects the learner’s focus to specific performance details on the criteria.</td>
</tr>
<tr>
<td><strong>Inclusion Style-E</strong></td>
<td>The teacher selects the subject matter skill and designs multiple levels of difficulty for each skill. Students select the level of difficulty that is appropriate to their performance. If inappropriate level decisions are made, the student may change the level choice. Students check their performance using the teacher prepared performance checklist (criteria sheet). The teacher circulates to acknowledge the choices the students have made (the teacher does not evaluate, assess, or suggest level changes) and to ask questions for clarification to affirm the accuracy of the students’ assessment process. Generally performance standards are established before students can move from one level to another.</td>
</tr>
<tr>
<td><strong>Guided Discovery Style-F</strong></td>
<td>The next six teaching-learning styles promote different discovery cognitive operations while engaged in the task. The content in these styles is new and not known in advance of the experience to the learner.</td>
</tr>
</tbody>
</table>
| **Convergent Discovery Style-G** | The teacher asks one student a series of specific questions*; each question has only one correct answer. The questions are logically sequenced so that each answer leads the student step by step to discover the answer—the idea, concept or solution—that is anticipated.  

(Content appropriate for Guided Discovery includes principles, rules, concepts, and relationships. Non-examples of discovery content include isolated facts, skills, dates, names or events. These content examples cannot be discovered.)

*Note: There are cognitive liabilities when this style is used in a large group. The discovery process is interrupted per student in a group setting; therefore, the content acquisition cannot be guaranteed for each student. |

The teacher designs a situation or question that has one specific correct response—the situation or question is new and the response is not previously known to the students. The learners are given individual and private time to use their thinking and questioning skills, reasoning, and logic to discover the anticipated answer. |
| **Divergent Discovery Style-H** | The teacher designs a single or series of problems, situations or questions that seek multiple solutions to the *same* problem. The task is new to the students; therefore, each student is invited to discover new possibilities, as they produce multiple (divergent) responses to the specific problem. |
| **Learner-Designed Individual Program Style-I** | The teacher designates a broad subject matter/topic. Within that topic each student is responsible for producing an individual learning program that includes setting goals and the process for accomplishing the goals. The learners design, implement, refine the program, and create performance criteria for their individual learning programs. |
| **Learner-Initiated Style-J** | A learner initiates a request to the teacher to plan his/her own learning experience. In this experience the student makes all decisions: selects the subject matter intent, designs, executes, and identifies the assessment criteria for the learning experience. The teacher participates when and how the learner requests. The teacher acknowledges the learner’s successful implementation of the plans and initiates questions when discrepancies emerge between the learner’s intent and actions. It is not the teacher’s job to evaluate, rather act as a reference source between the indicated intent and action.  

*This style is only for the individual who approaches the teacher to request this experience; it is not a whole class experience.* |
| **Self-Teaching Style-K** | The learner takes the role of both student & teacher setting all learning objectives. The learner makes decisions about subject matter intent, design, execution, and assessment of the learning experiences. This style is independent of the teacher and not initiated by the teacher. Feedback from others occurs only IF the learner seeks it.  

(This style is outside the realm of the classroom environment.) |