Description Inventory of Landmark Teaching Styles:
A Spectrum Approach

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Part I: Introduction

A significant factor influencing the quality of teacher education and pedagogical research is the ability to identify and to reliably distinguish one teaching style from another. Because different learning conditions/experiences are created by implementing different teaching styles, it is imperative that the knowledge and skills needed to distinguish one teaching style from another be consistent and reliable.   Mosston and Ashworth's Spectrum of Teaching Styles present a *continuum* of teaching and learning options. This **decision making continuum** identifies LANDMARK TEACHING STYLES—each landmark style has a specific decision structure for the teacher and the learners; thus, each teaching style creates a corresponding (predicted, expected) set of learning objectives/outcomes. Each landmark style serves as a marker or milestones signifying significantly different teaching-learning opportunities/experiences.

Multiple incidents or happenings always occur between markers and milestone events. Between the landmark styles there are many teaching and learning options (canopy designs)—if not an infinite number of options. ***Canopy** designs* along the continuum are also defined by a set of decisions with corresponding learning objectives; however, each and every *canopy* option does not foster significantly different decisions or learning objectives from the landmark styles that they are between. Rather canopy designs reinforce

in varying degrees a portion of or a combination of the decisions, the learning objectives, and the developmental focus of the two landmark styles they are between. Canopy designs exist between all landmark styles

These comments about *canopy designs* are not suggesting that they are less relevant or essential than the landmark styles. At times canopy designs are used to gradually lead learners to successfully participate in the new decisions and learning experiences of the landmark styles they are between. Additionally, when designing lessons it is necessary to implement canopy episodes with a variety of developmental emphasis to attract and invite students with their diverse interests, to insure internalization of the objectives and developmental focus, and to reinforce the application of different learning outcomes to a wide knowledge-base. Internalizing a variety of decision making skills and objectives (both landmark and canopy episodes) takes time, requires gradual and repeated practice. Such exposure to a variety of learning opportunities is the foundational rationale for implementing alternative teaching and learning styles (approaches, methods, strategies, etc.).

The concept of landmark and canopy teaching purports that all pedagogical teaching and learning experiences (methods, styles, strategies, behaviors, etc) can be clustered and placed along the Spectrum. This clustering and placement along the continuum is not arbitrary but rather determined by identifying the set of decisions and corresponding learning objectives that each experience <u>inherently</u> promotes.   The various Spectrum landmark styles delineate the DEMARCATION from one EXCLUSIVE

**SET of teaching-learning experience/approach to another significantly different
EXCLUSIVE SET of teaching-leaning experience/approach. All non-landmark teaching
events are canopy experiences that are located between landmark styles.**

Making a distinction between landmark and canopy is critical for identifying the learning
expectations of each teaching event. Therefore, when discussing, implementing, assessing
or conducting research it is imperative that a correct distinction be made as to the
identification of the observed teaching events—landmark or canopy. Each teaching
episode—canopy or landmark—can accomplish only the learning objectives that are
defined by the decision structure of the teacher and learners. The Spectrum theory
identifies the specific decisions of the landmark styles and identifies the expected learning
objectives—the Spectrum theory provides information, implementation procedures, and
implications about the anticipated learning outcomes of the landmark styles. It is
impossible and unnecessary to compile a complete listing of all canopy variations.
However, it is necessary to be able to identify the decision structure and anticipated set of
learning objectives for the canopy designs used in the classroom (in this document the
word classroom is used as a generic term; however the concept of landmark and canopy
behaviors apply to any learning environment or setting—work, business training, coaching,
gymnasium, extracurricular experiences, etc. Teaching and learning is not confined to just
the classroom or to any one subject matter.) The ability to identify, assess and cluster
random teaching events indicates **relational knowledge.** Every field has random events
that can be *understood, placed, philosophically connected to* larger primary concepts,
principles or relationships within a knowledge-base. Connecting random events to

primary, fundamental principles expands concepts and provides a structure for understanding, including and using new events and ideas. And so it is in pedagogy: all teaching events have an underlying **inherent** decision structure that influences the learning and developmental focus. All teaching events are akin to and complement one primary landmark teaching structure rather than another. Therefore, it is imperative for research to accurately distinguish each teaching event according to its intent: landmark teaching or canopy teaching.

Teaching, like all professions, requires **deliberate** planning of developmental experiences that accomplish specific learning outcomes.   Being able to distinguish—in preparation, implementation and reflection—landmark from canopy teaching is fundamental and foundational to pedagogical knowledge.

Canopy experiences do not develop the same landmark learning outcomes and landmark experiences cannot reinforce the variation that canopy designs can. Therefore, it is critical that they are not viewed as the same experience or labeled with the same teaching style **name**.   Canopy experiences are labeled according to the landmark style(s) they more closely reinforce, they indicate the decision(s) that differentiate them from the landmark style, and they highlight the primary developmental focus that is different from the landmark style(s).

For example: **Â+ socialization** = which reads as: canopy of Style A plus socialization.

This labeling means: that the teaching episode follows the decision structure of the

landmark Command Style <u>while adding</u> socialization to the <u>precision practice</u> of the task.

Another canopy example could be: **Â-posture, location, attire and appearance** = which

reads as: canopy style A minus posture, attire, and appearance.   This labeling means: some

of the landmark Command Style decisions (those noted: posture, location, attire and

appearance) are not made by the teacher but rather by the learner in this canopy episode.

Another canopy example: **Ĉ-partner selection and -location** = which reads as: canopy

Reciprocal Style-C minus partner selection and minus location. In this canopy the

landmark role decisions of the doer and observer remain; however, the teacher decides

partner selection. There are many critical ***subject matter, behavior or logistical*** reasons for

teachers making partner decisions.   The following examples are actual classroom observed

situations that required a canopy rather than a landmark teaching-learning episode.

> *A logistical reason*: extreme limited classroom space: Classroom that are
>
> maximally overcrowded or held in small, old module units have limited space that
>
> prevents a class of 30 students from moving beyond their limited desk area (no
>
> alternative location spaces are available); therefore, location and partner selection
>
> must be restricted to the person in front, beside, or behind. The teacher must
>
> maintain the existing location and make partner selection restrictions to maintain
>
> crowd control. Consequently, this episode is a canopy Reciprocal Style-C
>
> experience.

A behavioral reason for using a Ĉ-partner selection and -location occurs when representation of different gang members/bullies are in the same classroom. In the beginning stages of implementing the Reciprocal Style in these classrooms, it was physically dangerous to shift location patterns and partner selection to the students. Fights would break out, pencils were used as weapons, feet because moving obstacle courses—**the inability to appropriately make decisions and tolerate of others making specific decisions** INITALLY required canopy experiences—the restriction of shifting location and partner selection.

Subject matter reasons for not shifting location or partner selection could include task familiarity, addition of new students or absent students catching-up experiences, different learner needs-either reinforcing tasks or introducing new tasks. Anticipated learning outcomes determine *how students should behave/interact in the content--* Stated differently: Anticipated content learning outcomes must match the teaching style selection.

Canopy episodes can be designed in all styles.   The canopy designation or notation indicates the anticipated expectations (how is the learner expected to behavior/to interact in the content?); thus permitting more accurate analysis about the design, use and learning accomplishments of the canopy experience. The landmark styles, by theory design, indicate with predictability decision designations that corresponds to anticipated learning expectations.

Canopy designs can also embrace the essence of two styles.

For example: Canopy **ÊB-level choice and -self-checking** (canopy of the Inclusion Style-E minus learner choice and minus self-check with Practice style teacher feedback). This canopy design suggests that, although the task is designed for inclusion according to the *slanty* rope concept of the Inclusion Style-E (offering multiple levels of difficulty per task), the teacher assigns the learners to the task level they are to privately and individually practice; the Style B designation indicates that the teacher circulates and offers private feedback.   Because the teacher circulates to offer feedback, this canopy design is **ÊB-level choice and -self-checking.**

HOWEVER, a different canopy designation of the above **ÊB-level choice and -self-checking** would occur **IF** students were provided the performance criteria for self-checking—then the above canopy design would be **Ê-level choice (canopy Inclusion Style-E minus level choice).** This canopy suggests that the teacher makes the level decisions for each student and maintains the landmark designation that learners privately practice and engage in self-checking.

Canopy designs that connect two styles combine the distinguishing decisions of the two landmark styles to deliberately construct specific learning outcomes.   Canopy designs and landmark designs do not have identical learning outcomes; therefore a designation and notation of expectations is necessary. (Look for the soon to be published text on the Spectrum for more canopy examples.)

When discussing, assessing or conducting research it is necessary to have a marker from which to label and gauge events. Mosston and Ashworth's Spectrum of Teaching Styles has often been used to gather data about what is happening in the classroom; however, verification of the teaching and learning experiences has not always occurred. Therefore, research conclusions about what teachers are doing in the classroom are frequently suspect, ambiguous, inaccurate or invalid.

The Spectrum landmark styles can serve as a gauge or an instrument for the appraisal of classroom teaching events and learning outcomes only if the criterion for analysis is consistent with theory. Assessing the fidelity (the accuracy) between teaching style **INTENT** and classroom **ACTION** and the tools used to validate the **INTENT AND ACTION** are two factors affecting the quality of pedagogical research. Currently in research, several tools have been designed that use the Spectrum theory to determine classroom teaching styles—some of the descriptions used in these tools are ambiguous and inadvertently embrace multiple teaching images rather than just one exclusive teaching-learning image per style.   It is imperative that each teaching image be mutually exclusive when conducting research that states conclusions about the classroom actions, accomplishments or lack of accomplishments. Each style description cannot imply multiple teaching style possibilities or canopy options within one style description.

After years of working with the Spectrum and trying to distill the essence of each style to a short description, the following version has been produced. **The purpose of the following**

inventory is to provide unambiguous descriptions that most closely capture the classroom image of each landmark teaching style along the Spectrum.

These descriptions can be used in a variety of situations.   This inventory is very appropriate when studying to acquire more knowledge and information about alternative teaching styles.   When conducting research this inventory needs to be *abbreviated* and converted into a tool which complements the study's focus.   For example: Brendan SueSee*, a doctoral student from The Queensland University of Technology (QUT) in Australia, adapted the description inventory and designed a tool that examined *teachers' beliefs about their teaching styles used in physical education*. His study did not stop with just the beliefs teachers have about their teaching styles, he added classroom observations (using his instrument of the description inventory and the *Identification of Classroom Teaching-Learning Styles Based on the Spectrum of Teaching Styles Framework (Ashworth, 2002)* to help verify the degree to which beliefs and classroom actions matched. (*see literature section of the spectrumofteachingstyles.org)*

The description inventory can be used in Spectrum or non-Spectrum classrooms for study or research purposes.

1. Possible Study purposes…

    a. to engage in self-analysis and reflect on current teaching repertoire
    b. to check the fidelity of implementation practices by reflecting on the *observable images* within each style that are mentioned in the description inventory
    c. to expand personal teaching awareness by video-taping and comparing implementation practices to theory (ACTION TO INTENT)

d. to examine, expand, and refine the cognitive processes used (by identifying the specific cognitive operations applied) when presenting or practicing subject matter in the classroom
e. to design divergent and novel variations and canopy teaching episodes to increase participation, motivation and stimulate learners content acquisition
f. others?

2. Possible Research purposes – some topics could include…

a. to collect data about teachers' opinions and beliefs.. Note: classroom observations are necessary to verify opinions and beliefs
b. to collect data about the most frequently used leaning experience (method, model, strategy) teachers use in the classroom
c. to collect data about the number and description of which canopy styles teachers use
d. to collect data about the appropriateness between teaching style and subject matter selection
e. to determine the range of mobility ability demonstrated by teachers and supervisors in implementing and accurately identifying different teaching styles
f. to collect data about that reflects the attribute and developmental focus (physical, social, cognitive, emotional, ethical) emphasized in lessons
g. to asset the quality of deliberate teaching compared to teaching by default
h. others?

Pedagogical understanding and research must add value to teacher quality so learning can be enhanced.

Note that the descriptions in this inventory are abbreviations of the Spectrum theory. These descriptions do provide a mutually exclusive **image** highlighting the essential factors that comprise the different teaching styles; however, the descriptions do not identify each style's decision configuration.

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.   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 quality of the intended experience. The Spectrum delineates a continuum that acknowledges possibilities in teaching and learning from Command to Discovery.

Both the Description Inventory and the tool adaptations of this inventory are available for your use. These descriptions have been used in both Spectrum and non-Spectrum classrooms. We invite you to use this inventory and, please, forward your adapted versions for inclusion on the Spectrum Web site. We welcome your comments.

*SueSee, B., Ashworth, S., & Edwards, K. (2006). Instrument for collecting teachers' beliefs about their teaching styles used in physical education: *Adaptation of description inventory of landmark teaching styles: A spectrum approach*. Unpublished dissertation, Queensland University of Technology, Brisbane, Australia.

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A WORD OF CAUTION WHEN DESIGNING
A TEACHING STYLES RESEARCH TOOL

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 invite confusion and misinterpretation.

<u>AVOID</u> stating the following comments:
- *Avoid: 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 on the tool, 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 that define *who does what* in the classroom are omitted the accurate image of the style is compromised.

- *Avoid: 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 ways learners can practice skills and content that needs to be reproduced, replicated, and remembered with accuracy.

- *Avoid: 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 given subject matter. Content appropriate for Divergent Discovery could be any facet of any 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.

- *Avoid: Teacher asks open-ended questions* or *teacher asks open ended questions to guide students to the desired answer …reason:* The descriptions: *asks open-ended questions* or *asks open ended questions to guide students to the desired answer* are ambiguous and each invites a different path of thinking. The first statement suggests a DIVERGENT THINKING path and the second statement suggests CONVERGENT THINKING path. Neither statement inherently triggers MEMORY or DISCOVERY THINKING. The precise cognitive operation(s) that are included and the learners' content knowledge in the question will determine the thinking process—memory or discovery. These descriptions do not indicate any one specific teaching style. These phrases do not indicate that a teacher is implementing Guided Discovery. Asking questions is a part of all styles. No one teaching behavior (style, method, etc) has a monopoly on these phrases.

- *Avoid: 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.

- Others?

Scroll down for Part 2:   Description Inventory of the Landmark Teaching Styles

Part 2: Description Inventory of Landmark Teaching Styles:
A Spectrum Approach

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 a set of learning outcomes in content and human behavior. Thus, each description represents a significantly different teaching-learning style (O-T-L-O).

Spectrum Landmark Style Name	Classroom Description *What do you See Happening in the classroom?* *Or…* *Who is doing what and when?*
The image provided represents the following landmark style	The following five teaching-learning styles promote reproduction cognitive operations while engaged in the task. The content in these styles may be <u>new</u> to the learner or the content may be <u>a review</u> or <u>a practice</u> or <u>a test</u> of previously experienced content.
Command Style-A	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.
Practice Style-B	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. The students learn to set a pace to practice tasks within an allocated time frame.
Reciprocal Style-C	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 about the performance to the doer. When the first set of tasks are finished, the students switch roles and continue to the second* set of tasks. The teacher interacts with the observer to affirm the use of the criteria and the accuracy of the feedback comments and/or to redirect the observer's focus to specific performance details on the criteria. This experience offers practice in giving and receiving immediate feedback about the task and practice in developing comparing, contrasting, communicating, and social skills.

	(*In physical or manipulative tasks, both practice tasks can be the same)
Self-Check Style-D	The teacher selects the subject matter tasks and designs the criteria (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.
Inclusion Style-E	The teacher selects the subject matter tasks and designs multiple levels of difficulty for each task. 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 and to ask questions for clarification to affirm the accuracy of the students' assessment process and/or to redirects the learner's focus to specific performance details on the criteria. The teacher does not suggest level changes. Performance standards are established before students can move from one level to another.
	The next six teaching-learning styles promote different discovery structures and 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.
Guided Discovery Style-F	The teacher asks one student a series of specific questions*; each question has only one correct answer. The questions are sequenced in a logical pattern so that each answer leads the student step by step to discover the anticipated concept, principle, relationship or solution. (Content appropriate for Guided Discovery includes principles, rules, concepts, and relationships. Non-examples of discovery content include isolated facts, skills, dates, names—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 <u>each</u> student.*
Convergent Discovery Style-G	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 to sequentially and logically 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. The teacher acknowledges the production of multiple ideas rather than any singular idea.
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. The teacher acknowledges the production of ideas and asks questions for information or clarification about the learning program.
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 where 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	This style is independent of the teacher and not initiated by the teacher. The learner takes the role of both student & teacher setting all learning objectives. The learner self-initiates and is independently motivated to engage in this learning experience. The learner makes decisions about subject matter intent, design, execution, and assessment of the learning experiences. Feedback from others occurs only IF the learner seeks it. (This style is outside the realm of the classroom environment.)

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