

Content and Strategy Centered Teaching and Learning Emphasizing the Complementary Relationships Between Phases of Interest and Lessons

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Abstract

Contents differs from strategy teaching; they have different learning concerns. Content teaching is focused on engaging students in learning activities through which to address and resolve tasks, but strategy teaching is focused on engaging students in learning activities through which student learn to inform their concerns, understand advantages related to content learning. Most teachers focus on the former exclusively but not the latter. Though content and strategy teaching activities differ, many teachers do not differentiate them. Specifically, nothing in the teaching of content requires a content teacher to also teach strategies or help students to understand how contents relates to students' concerns. Yet, many teachers focus on teaching contents exclusively but also claim to consider and/or address students' interest; they conflate content with strategy teaching [1]. The result is that many students fail to learn well. In this article, content learning is identified as one of the ways a person addresses h/her concerns when a person must respond to the structures of events and occurrences in experiences. The aim of this article is to identify phases of thinking intended to achieve progress, explain the correspondence between phases of knowledge development activities of thinking and lessons, and emphasize Dewey's views that the aim of classroom learning is not to foil but to improve out of classroom thinking.

Keywords: Students' Interest, Spontaneous Thinking, Deliberate Thinking, Phases of Thinking, Triggered Interest, Maintained Interest, Sustained Interest, Personal Interest, Shared Interest, Formal Learning Activities, Informal Learning Activities

1. Introduction

Many student teachers do not learn much about students' interest during their training. When student teachers become teachers, they may want children to show interest in learning tasks and learn effectively; however, many of these future teachers do not learn about how to structure lessons to reflect and develop students' interest. Dewey explained that many students fail because teachers do not learn about students' interest or address students' interest when they teach; therefore, many students do not learn to develop their interests from school instructions [1]. Students do not learn to develop their interests from classroom lessons. Many students would like to but teachers do not deliberately structure lessons to help students learn about and understand (1) connections between their concerns and lessons (relationships between their in and out-of-school concerns), (2) how to generate and apply resources and thus facilitate tasks, (3) how to engage domain practices; develop strategies, and formulas to simplify tasks, (4) how to develop one's personal and unique capacities and skills, and (5) how to create a shared experience, a foundation for a true democracy. Consequently, many students do not learn through coordinated efforts, and they perform below their potential.

In school, most teachers are concerned about specific subject-matters even while students are thinking about the demands that the structures of events and occurrences in their lives naturally imposed upon them. Students are thinking about and distracted by structures of events and occurrences in their lives, by their concerns, but their teachers are thinking about how to help students engage or learn contents of subject matters. Even when teachers focus exclusively on content teaching, they teach pre-digested concepts. Most teachers believe students simply need head but not functional knowledge; they do not consider the purpose for which students need content knowledge and/or how students must be learning to more effectively acquire content knowledge. Dewey explained that teachers focus exclusively on content teaching and learning because they do not learn about or understand students' interest [1]. Therefore, on one hand, the natures and structures of the events and occurrences in students' lives (the natures of their experiences) draw them to and dictate their thinking about their concerns; but, on the other hand, teachers are constantly working on students, emphasizing that the one thing that matters most is knowledge of specific subject-matters.

Dewey indicated that learning problems in our schools are mostly because the term, interest, is a complex subject matter. Many

teachers do not learn how to address students' interest or help students to develop interest in learning. Teachers want to help students to develop and show interest in learning tasks but the issue is that they do not learn about students' interest; therefore, most teachers opt to focus exclusively on content teaching and learning, but not on students' interest. Many teachers do not answer the question, what is interest? However, Dewey gave a hint to understanding students' interest when he defined interest as "influence of object upon personal advantage," indicating a person must first have an object (of interest) to express an interest [1]. Dewey indicated that initially, one must first obtain an object as determined or undetermined; and, thus, to go on and express a desire or an interest [1]. The initial activities of thinking through which one obtains a determined or an undetermined object is spontaneous, not deliberate, meaning that to obtain an initial object as determined or undetermined, a person does not think deliberately or express an interest. A person expresses an interest when a person responds to an undetermined but not to a determined object.

Specifically, a student does not respond to a determined or an undetermined object in the same way; therefore effects of determined or undetermined object upon students' efforts differ. When a student represents an object as determined/certain, student stops thinking about the object, and student no longer seeks to develop knowledge of the object. Instead, the student seeks to utilize an object as determined. Any further thinking about a determined object is geared to securing or utilizing but not to improving knowledge of the object. Accordingly, a student with a determined object no longer seeks to improved knowledge of object, achieve enhanced object; therefore, the student is said to not extend h/her thinking beyond the object or express interest. Contrarily, when student represents an initial object as undetermined and/or uncertain (as having a possible but uncertain advantage), the student does not terminates thinking about the object. Instead, the student deliberately seeks to obtain an improved knowledge of the object, student extends h/her thinking beyond the initial object to clarify it, and the student is said to express an interest. In other words, a student expresses an interest when a student deliberately engages and seeks to achieve an improved knowledge of an object and thus to achieving progress (see Concepts of Interest and Learning, a recent published book by M. Odudukudu).

Dewey indicated that many teachers do not learn to differentiate between determined and undetermined objects, between an object of desired (or a desired object) and an object of interest (or an interesting object) [1]. Many teachers ascribe interest to objects that some children determine and represent as fun or pleasant and thus attractive, but not how children developed and obtained such objects. Therefore, many teachers often fail to deliberately structure lessons to address and/or develop students' interest. For example, a teacher may believe that a child is interested in video games despite the likelihood the child may not know of a negative outcome of constantly playing video games. The child had only been pre-empted (by a need for fun), not by an understanding of h/her interest to consider, accept, and represent video games as h/her object of interest, as the object that deserve more attention or helps to achieve progress.

Thus, teachers develop wrong mind-sets and engage methods contrary to students' interest and efforts, causing many students to perform below their potentials [1].

2. Purpose of Research

In the classroom phases of learning activities are deliberate; but in some cases, many teacher do not have justification for or explain how the structures of their lesson address students' thinking or facilitate development of students' interest and efforts. The purpose of this article is to identify phases of thinking and explain the correspondence between phases of knowledge development activities of thinking and lessons. Classroom learning is to improve out of classroom thinking.

3. Thinking and Learning

Dewey defined interest as influence of object upon personal advantage [1]. In analyzing this definition, it is found that when influenced by an object a person manifest one of two tendencies; a person may represent an object of interest as uncertain and thus engage in thinking to clarify the object, and one is said to seek, determine, or understand an advantage of an object for more improved self. Here, a person thinks; a person strives to engage activities of the phases of thinking, and one is said to express an interest. Otherwise, when influenced by an object, a person would seek to secure a determined advantage or object; here, a person would have determined and fixed attention upon a predetermined advantage. Thus, no further change to the object or advantage is possible, and one is said to express a desire for the determined object [1]. In both cases, tendencies a person expresses may appear as the same, but they differ. In both interest or desire, a person is eager to engage a determined objects. If one is hungry and determines that the food before h/her is good enough to eat, the person would engage in consuming it. Similarly, with doubt about the nutritional value of the food, the person would seek to determine the value of the food, but not to simply consuming it. In both cases, however, one readily displays an action. Therefore, one may easily mistake one for the other; one may easily mistake interest for a desire.

To further corroborate his definition of interest, Dewey pointed out that etymology of the word interest indicates it has its origin in the Latin word, *inter-esse*, meaning interest or to be in the middle of events or problems [1]. Dewey indicated that one who is amid problems would be seeking and thinking how to extricate self from the problems; otherwise, a person would remain as one with the problems [1]. Here, a situation and problem (object) are used interchangeably; thus, person thinks, and the situation is said to be one (object) of interest. Otherwise, one represents a situation as determine, thus the situation is said to be one (an object) of a desire. With thinking, a person displays h/her human capacity to achieve progress; otherwise, one does not get to the levels of seeking to represent an object differently from its initial occurrence or extricate self from object/problem. "I think therefore, I am," was a popular phrase by Rene Descartes, a 17th century French philosopher. However, many people do not differentiate among various phases of thinking. Allison and Panda, M.M. and Nath, R. showed that phases of thinking activities differ [2,3]. Allison showed that, to represent an object a person must (1) perceive, (2) analyze, and (3) synthesize an

appearance [2]. Wittgenstein showed that to clarify knowledge and achieve progress, a person must think (4) privately and (5) publicly [4].

Allison explained that where there is an occurrence, a person must represent the object of an occurrence, and a person achieves this representation through three phases of thinking activities; one must (1) perceive, become conscious of an appearance (2) analyze, generate instances or identifying characterizes of an appearance through which a person may determine and represent an appearance as an object, and (3) synthesize, determine relationships among instances of an appearance; selects and combines related instances to characterize an appearance and represent its object [5,6]. Quine explained that one synthesizes elements of an appearance and represents an object through confirmation and unification of the identifying features or elements of an appearance [7]. Allison indicated that thinking in phases (1) through (3) is spontaneous [5]. When an object appears, a person does not ask questions or hesitate before representing it. Only that in automatic representation, a person does not go beyond the object of an appearance; therefore, thinking does not help to achieve progress. For example, when there is an expected occurrence, a person perceives, analyzes and synthesizes (represents) an object of an occurrence. Spontaneous thinking does not go beyond representing an object of an occurrence or help in achieving progress.

4. Deliberate Thinking

To achieve progress, a person must think deliberately. In deliberate thinking, a person is still thinking, but the thinking is just not spontaneous. In deliberate thinking, a person does not start thinking from an unexpected occurrence; rather, Dewey indicated that a person models the automatic thinking processes; a person substitutes a problem or an uncertain object for an appearance in automatic thinking [1]. Specifically, deliberate thinking has three main characteristics that differentiates it from spontaneous thinking; (a) deliberate thinking is experimental and iterative, and thus, scientific, (b) deliberate thinking is intended to help achieve progress, not just to represent object of an appearance, and (c) the first appearance of deliberate thinking activity is the situational interest or thinking. It is thinking independently of an appearance and guided by personal or private rules [4,8,9]. The personal phase of deliberate thinking is initiated because a person seeks to achieve progress unavailable through spontaneous thinking. Another phase of deliberate thinking is the consultative or public thinking phase also identified by Wittgenstein [4]. Consultative thinking is where a person engages and thinks with others. This phase of thinking is initiated when a person finds that h/she is limited in h/her unilateral efforts or cannot maintain progress because the progress is opposed to other people's efforts. A person lives with others in a social environment; if one carelessly or unilaterally decides, engages, or achieves a goal, the results of a person's unilateral decisions, engagements, or achievement may be opposed to other people's achievements or efforts. This occurs when there is no proper consultation among the people.

5. Phases of Thinking

In responding to an occurrence, a person thinks spontaneously,

seeking to represent an object of an appearance, and a person engages three phases of thinking. A person (1) perceive, (2) analyze, and (3) synthesize an occurrence to represent an object. (4) To go beyond the spontaneous, representation of an object of an appearance and achieve progress, a person must think deliberately [8,9]. Finally, (5) one may think deliberately and still come short of achieving an enduring progress. Dewey indicated that to achieve an enduring progress, a person must also think consultative [1]. In consultative thinking, one would have engaged in and gone beyond the first four phases of (spontaneous and personal) thinking activities. Thus, the number of phases of thinking through which a person can achieve an enduring progress are said to be five: (1) perceptive phase, where a person becomes conscious of an appearance in the mind Allison; (2) analytic phase, where a person generates instances or identifying characterizes of an appearance through which a person determines and represents an appearance as an object, and (3) synthetic phase where a person determines relationships among instances of an appearance to represent an object, (4) personal (rules of thinking) phase, where a person thinks deliberately and independently seeking to achieve an individual personal progress, and (5) public (rules of thinking) phase, where a person thinks deliberately seeking to achieve an enduring progress, live in harmony with other people [5-7].

5.1. Connections Between Phases of Thinking and Lessons

Dewey, Allison, Millikan, and Wittgenstein indicated that thinking and lesson activities are both knowledge development activities [4-6,10]. They are intended to help achieve the same goal; and, that is, to develop knowledge of one's object. The difference is that spontaneous thinking are informal but deliberate thinking activities are formal knowledge development activities. For example, to represent an object, Allison explained that a person (1) perceives, (2) analyzes, and (3) synthesizes to represent an object of an appearance [5]. Here, however, a person's object may fail to help the person achieve h/her goal or progress; therefore, to achieve progress, a person seeks to more fully clarify and/or understand the object(s). Thus, a person does not merely rely on the initial object or situational occurrence; instead, a person thinks deliberately. In deliberate thinking, a person does not start thinking from an appearance; instead, Allison, Dewey, and Wittgenstein, indicated that a person must repeats or models the initial or spontaneous phases of activities of thinking (the thinking activities and processes through which one initially obtained or represented an object) [1,5,11]. A person creates, becomes conscious, and substitutes a problem (uncertainty) for an appearance to begin the activities of thinking to address or resolve problems. With deliberate thinking, a person engages in thinking to develop, and produce a more comprehensive object.

6. Thinking and Lessons

Specifically, activities of phases of lessons are undiscovered models of the activities of the phases of thinking; lessons are intended to clarify the knowledge development activities of thinking, to clarify knowledge and achieve progress. Dewey explained that knowledge that students acquire when their learning activities are structured to reflect their interest is more complete and relevant to students than otherwise [1]. The

activities of a lesson that correspond to students' interest are activities related to students' concerns or thinking, activities that students can access and engage. When student engages activities, student thinks seeking to conserve but not waste efforts; thus, student is said to express an interest. When student engages activities of a phase of thinking, they expresses an interest related to phase of thinking. During tasks, student engages similar thinking and expresses similarly interest in the phases of learning tasks. Interest in the phases of activities of thinking correspond to interest in the activities of the phases of lessons. Dewey indicated that interest expressed in response to a lesson activities is a model of the interest expressed relative to the activities of thinking [1]. Phases of lessons or interest activities correspond to the following phases of thinking; (1) Triggered Interest corresponds to the perceptive phase of thinking or needs for an ideal condition of experience, (2) Maintained Interest corresponds to the analytic thinking phase or needs for tasks resources; (3) Sustained Interest corresponds to the synthetic thinking phase or needs for guidance, (4) Shared Interest corresponds to the shared thinking phase or needs for cooperation; and (5) Personal Interest corresponds to the personal phase of thinking, needs for one's uniqueness.

6.1. Correspondence Between Phases of Thinking and Lessons

Activities of the phases of thinking just like the activities of the phases of a lesson are intended to develop knowledge. Thinking and lessons differ in that while thinking activities are informal, lesson activities are formal and deliberately. However, phases of lesson activities necessarily correspond to phases of thinking activities if they must be effective in helping to clarify demands of one's experiences. Thus, phases of activities of lessons are said to correspond to or reflect phases of activities of thinking. Dewey also emphasized that phases of lessons are not and should not be considered arbitrary; the phases of activities of lessons are models of the phases of activities of thinking intended to develop and enhanced knowledge and achieve progress; they consist of and demonstrate the same number of phases of activities [1]. A person expresses interest in the phases of thinking just as a person does in phases of lessons to produce knowledge. Phases of thinking correspond to and are reflected in phases of lessons. Wittgenstein and Dewey indicated that activities of the phases of a lesson are models of the activities of phases of thinking [1,4]. Just as a person must demonstrate interest and engage phases of thinking activities to achieve progress, a student must demonstrate interest and engage phases of lesson activities to achieve progress. In other words, phases of lesson relate to phases of thinking activities, and they include (1) Triggered Interest, (2) Maintained Interest, (3) Sustained Interest, (4) Shared Interest, and (5) Personal Interest phases of lessons.

7. Perceptive Thinking

Allison explained that with perceptive thinking, a person thinks and obtains an appearance that a person engages to develop and represent as an object [5]. A person represents an object only after perceiving an appearance. Also, perceptive thinking is pure, not objective; one is unaware of an object in obtaining an appearance. Imagine looking away from a present activity and your eyes lighted upon a new object, say, a bug. Neuroscience

explained that the lenses in your eyes focus light photons of the bug onto your retinas. The photosensitive retina cells respond by sending the neural impulses to the brain. The brain processed neural impulses or signals and forms an image of the bug in one's mind. Allison corroborated these neuroscience views of perception and pointed out more elaborately that before your retinas respond to neural energies from the bug or send impulses to your brain, they must first receive the impulses [5]. There must first be a connection of impulse energies between the bug and the eye to trigger a perception [12]. Allison and Dewey indicated that during perception, a person does not obtain an image or object directly; rather, a person must first obtain an appearance to have a basis for representing an object [1,13]. After perceiving or obtaining an appearance, a person must further engage in empirical thinking; that is, think (analytically and synthetically) to obtain the empirical form or object of an appearance before a person represents an object of an appearance.

7.1. Triggered Interest and Perceptive Thinking

The Triggered Interest Phase of lessons corresponds to the perceptive phase of thinking. In the perceptive phase of thinking, a person obtains an appearance from events and occurrences in h/her environment and begins the activities of representing object of an appearance [1,5]. The perceptive phase of thinking is where a person interacts with events and occurrences in h/her environment to start the activities of thinking and representing an object. Interactions between a person and occurrences must occur in an ideal environment for a person to obtain appearance and represent an object [7]. Only after a person perceives an appearance can a person engage other phases of activities of thinking, go on to represent an object [5]. Activities in the first or triggered interest phase of lessons correspond to activities in perceptive phase of thinking; just as a person must be connected to the occurrences in his or her environment to perceive an appearance, in the first or triggered interest phase of a lesson, a student must understand connections between h/her experiences and a lesson for students to properly engage in learning activities.

7.2. Correspondence Between Perception and Triggered Interest Phase of Lessons

The phase of perceptive thinking is where a person begins the activities of thinking to represent object of an appearance [5,14]. In the phase of perceptive thinking, there must be an effective connection between thinking and an occurrence for a perception to occur. Activities in the phase of perceptive thinking correspond to or are reflected in activities of the first or triggered interest phase of a lesson; for, in the triggered interest phase of lessons, a person is faced with disconnected and unrelated events and occurrence in h/her environment and, to apprehend an appearance, a person must be connected to an occurrence to perceive its appearance. Similarly, in the first or triggered interest phase of lessons which is a model of perceptive thinking, there must be an effective connection between students' ongoing thinking about their concerns and concepts of lessons for students to easily and/or effectively connect with, engage, and grasp concepts of a lesson. Dewey emphasized that lesson activities must be relevant to students' concerns and/or experiences for them to easily engage learning tasks [1]. Bara & Xhomara and Bechter and Dimmock explained that when a teacher creates activities that help students

to understand connections between their concerns and lessons, students engage tasks more easily [15,16].

7.3. Central focus of the Triggered Interest Phase of Lessons

Darling-Hammond and Hébert indicated that activities in the Triggered Interest phase of a lesson are intended to help students understand connections between a lesson and students' concerns [17,18]. Once a student can understand connections between a lesson and h/her concerns, the student would easily engage learning activities. With the triggered interest phase of a lesson, a teacher's focus is to help students understand connections between a lesson and their concerns. Teachers starts the lesson by engaging students in discussing their objects of interest and concerns, or helping students to identify strategies through which students might easily understand connections between their concerns and lesson. Thus, teachers help to align students' experiences with a subject matter.

7.4. Direct and Indirect Benefits of Triggered Interest Phase of Lessons

Direct Benefits: Students engage in discussing their concerns focused to understand connections between their concerns and concepts of lessons, and are thus enabled to more easily and effectively eased engage learning activities. Students pay more attention to tasks and learn more effectively when learning activities are related to their experiences [18].

Indirect Benefits: Students who learned to understand connections between their formal and informal experiences often develop habits and/or capacities to identify connections among their experiences. Students learn to tap into and reflect on their experiences and thus generate resources for understanding and engaging lesson activities [1,4]. And, students develop the habit of reflecting on their experiences, knowing they are responsible to initiate, develop, and determine what and how they learn.

8. Analytic Thinking

In the phase of perceptive thinking, a person' produces an appearance, not an object. In the course of seeking to obtain an object of appearance, a person must engage with and maintain the appearance. Here, a person analyzes an appearance, generating elements or marking the instances that characterize the appearance [14]. In analytic thinking, Allison explained that a person must generate elements/instances characterizing an appearance [5]. In analytic thinking, a person seeks the means through which to characterize an appearance; and a person generates elements based on what the person apprehends from an appearance; a person identifies instances of an appearance through which to characterize an appearance, Here, Quine, Millikan, Normandin et al., and William indicated that in analytic thinking, a person recalls elements from experiences where one had identified comparable objects and to recognize the features in a present appearance, and thus to say that the features are of this or that object [6,7,19,20]. In analytic thinking, one is focused on appearance and its characteristics; thinking is related to and about an appearance and its characteristics.

8.1. Maintained Interest and Analytic Thinking

The second or maintained interest phase of lessons relates to the

phase of analytic thinking. In the phase of analytic thinking, a person generates instances (thought elements) through which a person characterizes an appearance to represent it as an object [5]. Dewey indicated that just as a person must generate elements of an appearance to represent its object, activities in the maintained interest phase of a lessons involve the production and application of resources to facilitate and maintain learning activities [1]. Where teachers do not deliberately engage and help students to generate learning resources, students may lack the means to easily engage and address learning tasks. On the other hand, when students can learn to engage and deliberately generate learning resources, they learn to facilitate their efforts [21]. With the Maintained Interest phase of lessons, students start to learn about resources and how resources relate to lesson tasks. Students learn to generate resources both in the classroom and outside of the classroom. The maintained interest phase of lessons is initiated when a teacher engages h/her students in learning to develop and apply resources to learning tasks in the classroom.

8.2. Correspondence Between Analytic Thinking and Maintained Interest Phase of Lessons

The phase of analytic thinking is where a person generates instances through which a person characterizes an appearance [14]. In the analytic thinking, a person characterizes an appearance and thus represent or obtain an object. Activities in the phase of analytic thinking correspond to and/or are reflected in activities of the Maintained Interest phase of a lesson. In the phase of analytic thinking, a person is faced with an unfamiliar occurrence (an appearance) and, to move on effectively, a person must generate elements through which to characterize an appearance (ie., facilitate the efforts). Similarly, in the second or maintained interest phase of lessons which is a model of analytic thinking, to move on effectively, students must produce elements or resources through which to develop a lesson and move forward.

8.3. Focus of the Maintained Interest Phase of a Lesson

Activities in the Maintained Interest phase of lessons are intended to help students learn about how to generate and apply resources, and address tasks more effectively. With the maintained interest phase of lessons, a teacher's focus is to help students develop their efforts in accessing and utilizing resources, and thus to persevere with tasks. Teacher engages and gets students to understanding how resources relate to and help facilitate learning activities. In the maintained interest phase of a lesson, teacher explains resources, engages students in learning to generate resources, and students learn how to develop and apply resources, simplify learning activities, and address learning issues. Students engage task more easily when they can gain access to resources to facilitate efforts, and students persevere with tasks [1].

8.4. Direct and Indirect Benefits of Maintained Interest Phase of Lessons

Direct and Immediate Benefits: Students learn that challenges or difficult tasks can always be simplified, and students learn to develop resources to engage and address challenging/difficult tasks. Students learn about the significance and functions of resources, how relevant resources help to facilitate efforts, and

they seek to develop and utilize resource to address and resolve problems. Students learn to identifying or developing resources before tasks help to simplify tasks and facilitate efforts. They learn to look forward to engaging activities.

Indirect and/or Long-Term Benefits: Students who learned to identify, develop, and apply resources and to address learning issues in the classrooms will repeat the same process in real situations. They develop increased capacities to more effectively develop, identify, and apply resources and address problems in their lives [1,4].

9. Synthetic Thinking

In the phase of synthetic thinking, a person produces the means to determine or understand relationships among the elements characterizing its object; a person determines relationships among elements characterizing an appearance to identify or represent the appearance as object. Here, a person determines how and/ if the instances characterizing an appearance are related in representing it as an object. In other words, to represent an appearance as a specific object, its elements must be related; unrelated elements are discarded [7]. Millikan and Brown also indicated that a synthesis of an object is made through confirmation and unification of the identifying features or elements of an object [6,22]. This is effectively accomplished when a person has an object in mind and a person must associate certain related elements but not the other to represent an object. In other words, with an object in mind, a person adopts and applies certain rules in examining and determining the elements that must or not be included, which elements are or not related in represent an object of an appearance; thus, a person is said to synthesize or represent an object of appearance.

9.1. Sustained Interest and Synthetic Thinking

The Sustained Interest Phase of lessons corresponds to the synthetic phase of thinking. In the synthetic phase of thinking, a person determines relationships among elements of appearance to represent an object of appearance [5,23]. Activities in the phase of synthetic thinking is where a person determines relationships among elements or instances of an appearance and thus to identify the object of appearance. Without determining relationships among elements pointing to and characterizing the object of appearance, a person does not represent an object of appearance [5]. A person must determine and understand relationships among the instances or characteristics of an appearance generated in the phase of analytic thinking to identify an object. Activities in the phase of synthetic thinking correspond to activities in sustained interest phase of a lesson. In the phase of synthetic thinking, a person is faced with disparate instances of an appearance and a person seeks to obtain a combination of instances characterizing an appearance to obtain a more proximate object of appearance. Therefore, a person must develop and apply certain strategies and formulas to help determine relationships among the various instances of an appearance. Similarly, in the sustained interest phase of lessons (which is a model of synthetic thinking), to understand a lesson, students must produce strategies and formulas through which to and understand the lesson.

9.2. Correspondence Between Synthetic Thinking and Sustained Interest Phase of Lessons

Allison explained that in synthetic thinking, a person determines relationships among elements of an appearance to represent an object of appearance [5]. Dewey indicated that as a person determines how instances are related in characterizing and representing an object of an appearance, in a corresponding phase of a lesson, students learn how various concepts of lessons are related to understanding the lesson; students must understand the strategies and formulas that explain relationships among concepts to understand the contents of lessons [1]. Where a teacher can engage students in learning to derive formulas and understand strategies of a subject matter, students learn contents of a subject matter more easily, and they develop increased familiarity with domain contents and sustain their interest. Students develop capacities to address domain problems.

9.3. Focus of the Sustained Interest Phase of a Lesson

Activities in the sustained interest phase of a lesson are the activities through which a student understands the object of a lesson. In the sustained interest phase of lessons, students engage in learning domain strategies and formulas (means) through which to understand concepts of lessons. Just as activities in the phase of synthetic thinking help to determine and understand relationships among instances of an appearance to identify an object, in a corresponding phase of a lesson, students must understand domain strategies and formulas to understand content of lesson. With sustained interest phase of a lesson, teachers help students to grasp the substance and/or object of a lesson. Students seek to understand concepts of a subject matter, learn what domain experts do, and thus to easily assimilate into a domain of practice.

In the sustained Interest Phase of a Lesson, the teacher helps students to learn the contents of a lesson. Content teaching and learning are about subject-matter activities where students just learn to obtain and apply content knowledge to address and resolve concerns, but not how to do so effectively. Activities in the sustained interest phase of lessons are focused exclusively on contents learning. With the sustained interest phase of lessons, teachers are focused on helping students to understand strategies and formulas through which to effectively engage, address, and resolve tasks. Students develop content strategies and formulas, learn how concepts are related, and students learn more effectively. Specifically, strategy and content learning activities differ [1,4].

9.4. Direct and Indirect Benefits of Sustained Interest Phase of Lessons

Direct Benefits: students learn how formulas and strategies help to simplify learning tasks. Students engage tasks with a focus to develop and apply formulas and strategies to simplify and facilitate tasks. However, student may focus exclusively on accumulation of content knowledge, but not how to a more effectively learn and accumulate contents knowledge, accumulate content knowledge, but fail to develop interests and thus the skills to re-engage content learning tasks, and develop increased knowledge and familiarity with contents.

Indirect Benefits: students develop increased understanding of the subject matter and students are able to independently create and engage learning activities for self. Students learn to independently develop strategies and formulas for effective learning. Students develop increased skills for effective content learning, democracy [1].

10. Private/Personal Thinking

Wittgenstein differentiated between phases of personal and shared thinking activities [4]. Tully emphasizing Wittgenstein's views of private and public thinking explained that activities in the phase of personal and consultative thinking are deliberate and different from activities of initial phases of spontaneous thinking identified by Allison [5,8]. They explained that Private and personal thinking is because a person represents h/her object as uncertain, undetermined or problematic. Wittgenstein pointed out that a person thinks deliberately and privately because a person represents h/her object or goal as undetermined, uncertain or problematic, and a person seeks to understand and achieve personal objects and goal [4]. In other words, a person thinks deliberately and privately because a person seeks to more fully clarify and understand h/her object, but not because a person seeks to determine and represent an object of appearance, as one does in spontaneous thinking. Specifically, deliberate and private thinking arises when a person is dissatisfied with h/her situational objects and thinks privately or personally and deliberately to gain understanding and satisfaction. Unlike private and personal thinking, a person does not think spontaneously; rather, thinking is deliberate, a person models the initial phases of activities of spontaneous thinking.

Wittgenstein explained that phase of personal thinking is where a person engages in independent/private thinking; where a person engages in thinking and/or learning activities, and develops and apply h/her unique capacities/skills independent of others [4]. With activities in the personal phase of thinking, a person identifies and develops h/her skills and achievements through which to communicate and share with others [4]. With awareness of one's skills, a person is more encouraged to engage and develop such skills. Activities in the phase of private thinking correspond to activities in personal interest phase of a lesson. In the Personal Interest phase of a lesson, teachers' focus is to help students identify and develop their unique skills. Just as a person thinks independently to develop one's personal skills, in a corresponding phase of a lesson, students engage in independent learning activities to develop their skills, and students learn to develop their unique skills.

10.1. Correspondence Between Private Thinking and Personal Interest Phase of a Lesson

Wittgenstein indicated that the personal interest phase of lessons is where students learn how to learn independently [4]. Here, students learn to independently engage in learning activities and develop their unique capacities through which to effectively engage and share with others, achieve progress. In private personal thinking, Panda & Nath indicated that students interpret and develop their experiences based on their personal preferences and theories [3]. Activities in the private phase of thinking correspond to activities in the personal interest phase

of a lesson. With the personal interest phase of a lesson, a person reflects on the challenges that a person faces when he/she interacts with others. A person considers the social pressures on h/her when in the outside world and seeks to adjust h/her efforts, and a person develop h/her unique skills. Similarly, in the personal interest phase of lessons (which is a model of private thinking), to develop one's personal and unique skills, students must engage in private learning activities where a person might develop h/her personal and their unique skills.

10.2. Focus of Personal Interest Phase of a Lesson

Wittgenstein explained that in the personal interest phase of lessons, students engage in independent learning activities and develop their individual and unique approaches to learning activities [4]. With the personal interest phase of a lesson, students learn to more fully develop their individual and personal approach to understanding how a lesson relates to their personal interests or helps to achieve personal goals and objectives; students engage in independent learning tasks, seeking to understand and develop personal capacities through which they might contribute to and help others Wittgenstein [4]. In the personal interest phases of lessons, a teacher's focus is to help students engage in independent learning activities and develop their unique capacities through which to engage others and achieve progress.

Activities in the personal Interest Phase of a Lesson are intended to engage students in learning to independently develop personal capacities and contribute to others. With personal interest phase of a lesson, teachers engage students to learn reflectively, to reflect on, develop and become increasingly aware of their uniqueness, skills, and strategies. In other words, with a focus on independent learning, students learn to reflect on their capacities and skills; students seek to develop and become aware of their skills and capacities [24].

10.3. Direct and Indirect Benefits of Personal Interest Phase of Lessons

Direct Benefits: Students learn to identify, recognize and develop their unique individual capacities and achievements through which they intend to communicate and share their experiences with others [4]. Students engage in and become aware of learning to develop their unique capacities. Students look forward to engage in independent learning activities and students develop their individual unique capacities [1].

Indirect Benefits: With a student's awareness of student's unique capacities and achievements, a student is most absorbed to apply self, thus, to further engage, develop, and discover h/her other capacities; and a student is said to engage in learning how to learn [1]. Students develop their individual and unique learning skills and develop capacities to effectively contribute a domain of practice or society. They learn how to learn [1].

11. Public/Consultative Thinking

Wittgenstein explained that one must (5) think deliberately/consultative to develop shared efforts and achieve progress [4]. Dewey agreed with Wittgenstein's view and accordingly emphasized interest that a person demonstrates in the various

phases of thinking activities [1]. Dewey indicated that a person is unavoidably affected and is affected by others [1]. Therefore, a person must develop capacities to consider or understand others and effectively achieve h/her object. A capacity to engage others in consultative thinking, to develop shared experience and efforts cannot be achieved independently or in isolation. Students learn to develop shared efforts and consultative thinking capacities when they learn interactively; when teacher structures learning activities and get students to interact with (1) one another, (2) their teacher, and (3) their in- and out-of-school experiences. Hitherto, students develop relationships among their experiences and with one another without learning or understanding the principles behind the needs to interact with others. Teachers have often learned that the purpose of group learning is to learn the contents effectively. Recently, however, some educators who explain interactive teaching and learning activities are also emphasizing group learning principles which teachers must consider or understand to offer balanced lessons.

In consultative thinking, a person engages others to develop shared efforts and experiences. Tully and Wittgenstein explained that in public thinking, group members seek to more fully understand one another [11,25]. People learn about what matter to others or how to meet one another needs. In consultative/public thinking, Wittgenstein explained that people learn from one another and develop shared knowledge and experiences [11]. Dewey's agreed with Wittgenstein's views of consultative thinking, and accordingly emphasized shared learning activity as a way to effectively develop and achieve shared experience and progress in a society [1,11]. Dewey indicated that a person unavoidably affects and is affected by others; that to achieve progress, a person must include others in h/her thinking to develop cooperation, shared knowledge, and progress [1].

11.1. Correspondence Between Public Thinking and Shared Interest of Phase of Lessons

In consultative/public thinking, a person engages with others to develop shared progress. Here, a person engages others to more fully understand h/her object, and a person is said to engage in shared thinking activities. Wittgenstein indicated that shared thinking activities are deliberate efforts to create an ideal or progressive society [4]. It is the phase of thinking where people engage one another to develop a democracy and achieve progress. Without consultative and public thinking, people do not develop shared activities or learn well from one another [1]. Activities in the phase of public thinking correspond to the shared interest phase of lessons. With the shared interest phase of thinking, a person is faced with the challenges of how to more effectively engage others and achieve enduring progress. A person must engage other to develop a shared experience through which to achieve shared experience and shared and enduring progress. Similarly, in the shared interest phase of lessons which is a model of consultative thinking, to achieve shared experience, students must produce elements or resources through which to develop a lesson and move forward.

11.2. Focus of the Shared Interest Phase of a Lesson

Just as in the phase of shared thinking, activities in the consultative interest phase of a lesson are intended to engage

and include others in the shared learning activities of a lesson, in shared experience. Activities in the shared interest phase of a lesson are the activities through which students engage and learn from and about one another. Dewey indicated that in the shared interest phase of a lesson, students engage in group activities and model democratic practices [1]. In other words, in the shared interest phase of a lesson, students learn to engage and socialize with one another; they learn from one another under the rules that they learned to create for themselves. In the shared interest phase of a lesson, the teacher explains and helps students to form groups, develop group norms, and engage in group activities. Teacher guides students as students learn to interact and share their learning achievements with one another [26].

With shared interest phase of lessons, teachers explain and guide students to engage in shared (group) activities. Students engage in group activities based on group initiated and formulated rules; students learn to understand, change, and/or comply with group rules. Without the phase of shared interest activities, students do not engage in learning to develop ideal social norms or achieve shared experiences or enduring progress. People grow in different directions and are often opposed to one another.

11.3. Direct and Indirect Benefits of Shared Interest Phase of Lessons

Direct Benefits: Students who engage in shared learning activities interact with one another under the same rules which they learn to develop and develop for themselves. They learn to comply with rules and laws in their interactions with others. They learn how to value and accept one another [11].

Indirect Benefits: Students who learn and developed their consultative thinking capacities will also develop increased understanding of the needs for rules, laws, and shared activities. They are inclined to be more involved in making the rules and laws that guide their interactions with others. Students learn more effectively from one another and achieve excellence [1]. They easily engage task and demonstrate increased interest when they can positively relate to and interact with others [1,4,27-43].

References

1. Dewey, J. (1933). *A restatement of the relation of reflective thinking to the educative process*. DC Heath.
2. Allison, H. E. (2012). *Essays on Kant*. Oxford University Press.
3. Panda, M. M., & Nath, R. (2020). Wittgenstein on public language about personal experiences. *Philosophia*, 48(5), 1939-1960.
4. Williams, M. (1999). Wittgenstein, mind and meaning. *Toward a social conception of mind*. London: Routledge.
5. Allison, H. E. (2004). *Kant's transcendental idealism*. Yale University Press.
6. Millikan, R. G. (2013). What's Inside a Thinking Animal?. *Deutsches Jahrbuch Philosophie*, 4, 889-893.
7. Quine, W. V. O. (1992). *Pursuit of truth* (Revised ed.). Cambridge, MA: Harvard University Press.
8. Tully, J. (2002). Political philosophy as a critical activity. *Political theory*, 30(4), 533-555.
9. McNally, S., & Slutsky, R. (2017). Teacher-child

- relationships make all the difference: constructing quality interactions in early childhood settings. *Early Child Development and Care*, 188(5), 508–523.
10. Dewey, J. (2018) *Experience & Education*, PB, First Free Press Edition.
 11. Wittgenstein, L. (1926). *Philosophical Investigations*. Translated by G. E. M. Anscombe. New York: MacMillan.
 12. Brown, R. (2019) *Consciousness Inside and Out: Phenomenology, Neuroscience, and the Nature of Experience*. Dordrecht: Springer.
 13. Allison, H. E. (2015). *Kant's transcendental deduction: An analytical-historical commentary*. OUP Oxford.
 14. Quine, W. V. O. (1995). *From stimulus to science*. Harvard University Press.
 15. Gezim, B. A. R. A., & Xhomara, N. (2020). The effect of student-centered teaching and problem-based learning on academic achievement in science. *Journal of Turkish Science Education*, 17(2), 180-199.
 16. Bechter, B. E., Dimmock, J. A., & Jackson, B. (2019). A cluster-randomized controlled trial to improve student experiences in physical education: Results of a student-centered learning intervention with high school teachers. *Psychology of Sport and Exercise*, 45, 101553.
 17. Darling-Hammond, L. (2020). Accountability in teacher education. *Action in teacher Education*, 42(1), 60-71.
 18. Hébert, C. (2015). Knowing and/or experiencing: A critical examination of the reflective models of John Dewey and Donald Schön. *Reflective Practice*, 16(3), 361-371.
 19. Ensink, K., Maheux, J., Normandin, L., Sabourin, S., Diguier, L., Berthelot, N., & Parent, K. (2013). The impact of mentalization training on the reflective function of novice therapists: A randomized controlled trial. *Psychotherapy Research*, 23(5), 526-538.
 20. Wiliam, D. (2013). Assessment: The bridge between teaching and learning. *Voices from the Middle*, 21(2), 15-20.
 21. O'Connor, C., & Michaels, S. (2019). Supporting teachers in taking up productive talk moves: The long road to professional learning at scale. *International Journal of Educational Research*, 97, 166-175.
 22. Brown, F., & Hunter, R. C. (Eds.). (2006). *No child left behind and other federal programs for urban school districts*. Emerald Group Publishing Limited.
 23. Ameriks, K. (1982). Recent work on Kant's theoretical philosophy. *American Philosophical Quarterly*, 19(1), 1-24.
 24. Hébert, C. (2019). Reflective Teaching Practices; Engage students to think and determine connections among their experiences, 16(3), 361-371.
 25. Tully, J. (2008). *Public philosophy in a new key: Volume 1, democracy and civic freedom*. Cambridge University Press.
 26. Yonk, R. M., & Simmons, R. T. (2023). Learning through Shared Mental Models: Experiential Learning, and Transaction Costs in a Research Institute. *Higher Education Studies*, 13(2), 52-62.
 27. Hamidah, A. S., & TLS, D. S. (2020). The Relationship between Students' Learning Interest and Students' Problem-Solving Skill of Eighth-Grade Students in Learning Mathematics. *JURNAL Riset Pembelajaran Matematika Sekolah*, 4(2), 70-80.
 28. Dewey, J. (2022). Experience and education. *Foundations of Education* (pp. 141–145). Routledge.
 29. Emdin, C., Adjapong, E., & Levy, I. P. (2021, July). On science genius and cultural agnosia: Reality pedagogy and/as hip-hop rooted cultural teaching in STEM education. In *The Educational Forum* (Vol. 85, No. 4, pp. 391-405). Routledge.
 30. Ghazavi, V. (2023). Pluralising (not limiting) the agent of change: A task for real-world political philosophy. *Res Publica*, 29(3), 445-467.
 31. Heidemann, D. (2021). Kant and the forms of realism. *Synthese*, 198(Suppl 13), 3231-3252.
 32. Hovland, J. B. (2020). Inclusive comprehension strategy instruction: Reciprocal teaching and adolescents with intellectual disability. *Teaching Exceptional Children*, 52(6), 404-413.
 33. Johnson-Laird, P. N. (2004). The history of mental models. In *Psychology of reasoning* (pp. 189-222). Psychology Press.
 34. Morgan, C. W., Cheatham, G. A., Lim, S., Amilivia, J. M., & Martinez, J. R. (2023). Enacting the Social-Relations Approach: A Relational Framework for Inclusive Early Childhood Education. *Exceptionality*, 31(5), 362-378.
 35. Myers Jr, S. L. (2021). Bringing research on race and crime into the 21st century: Reflections from over the years. *The Review of Black Political Economy*, 48(1), 123-127.
 36. Miller, A., & Sultanesco, O. (2022). Rule-Following and Intentionality.
 37. Ratcliffe, C. E., & McKernan, S. M. (2012). Child poverty and its lasting consequence. *Urban Institute Low-Income Working Families Working Paper*, (21).
 38. Renninger, K. A., & Hidi, S. (2016). *The power of interest for motivation and engagement*. New York: Routledge.
 39. Shah Ph, D., & Kumar, R. (2020). Similarities and difference between LCT and TCT. *International Journal of Creative Research Thoughts (IJCRT)*, 8(7), 5694-5720.
 40. Shaughnessy, M., & Boerst, T. A. (2018). Uncovering the skills that preservice teachers bring to teacher education: The practice of eliciting a student's thinking. *Journal of teacher Education*, 69(1), 40-55.
 41. Talbert, E., Hofkens, T., & Wang, M. T. (2019). Does student-centered instruction engage students differently? The moderation effect of student ethnicity. *The Journal of Educational Research*, 112(3), 327-341.
 42. Umarkulova, K. B. (2023). THE CONTENT OF THE PROCESS OF FORMING INTEREST IN ARTISTIC SAMPLES IN STUDENTS. *International Journal of Pedagogics*, 3(01), 86-92.
 43. Usman, O., & Ardiyani, Y. (2021). The Effect of Learning Environment, Learning Interest, and Learning Motivation on Learning Achievement of Students SMAN Singaparna Tasikmalaya Students. (December 29, 2021).

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