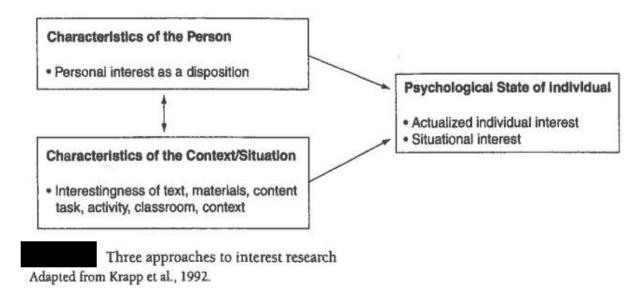
Interest has been described as an outcome of motivated behavior because it develops and deepens with engagement, developmentally, interest is also a mediator of engagement (Hidi & Renninger, 2006).

The importance of interest as a motivational variable and the pivotal role interest plays in education, particularly influencing achievement and learning, has been recognized for some time. Interest made a significant contribution to what people paid attention to and remembered. John Dewey maintained that interest facilitates learning, improves understanding and stimulates effort as well as personal involvement (Dewey, 1913).

Renninger and Wozniak (1985) refer to research on interest that although many researchers provided lengthy discussions of the role of interest in the explanation of attentional phenomena, only in the last few years have psychologists once again begun to give interest serious consideration. As Eckblad suggested, interest as an affective state appears to reflect a central feature of the relationship between the knowledge/value system of the individual and the environment.

Krapp, Hidi, and Renninger (1992) have proposed that there are three general perspectives on interest -



Krapp, Hidi and Renninger define interest as "a unique motivational variable, as well as a psychological state that occurs during interactions between persons and their objects of interest, and is characterized by increased attention, concentration and affect (i.e. feeling)" as well as "a relatively enduring predisposition to re-engage with particular content such as objects, events, ideas and tasks (Hidi, 2006)."

Research on interest has included both descriptive and quantitative methods. Findings from these studies indicate that there are four phases of interest development (Hidi & Renninger, 2006): a triggered situational interest, a maintained situational interest, an emerging individual interest, and a well-developed individual interest. Affective as well as cognitive factors are considered. Educational implications of the proposed model are identified.

Phase 1: Triggered Situational Interest

Triggered situational interest can be described as short-term changes in affective (i.e. emotional) and cognitive processing sparked by content (e.g. information, tasking) that is incongruous, intense, relevant, surprising, varied and so forth. This phase is generally, but not always, externally supported by the environment. For instance, group work, puzzles, computers and technology have been found to trigger situational interest (Hidi & Renninger, 2006).

Phase 2: Maintained Situation Interest

Maintained situational interest is a psychological state subsequent to triggered situational interest that involves focused attention and persistence over an extended period of time for content/tasks that an individual considers meaningful or relevant. Like the first phase, the second phase is generally but not in all cases externally supported and can be fostered by understanding-conducive environments such as project-based learning, cooperative group work, and one-on-one tutoring (Hidi & Renninger, 2006).

Phase 3: Emerging Individual Interest

Emerging individual interest marks the beginning of a relatively enduring predisposition for an individual to seek repeated engagement with particular content or tasks over time. This phase is characterized by positive feelings, stored knowledge and stored value as the individual values to opportunity to reengage tasks related to their emerging interest and will opt to do these if given a choice (Hidi & Renninger, 2006).

Phase 4: Well-Developed Individual Interest

The final-phase, called well-developed individual interest, is basically an amplification of the previous third phase. It involves an enduring predisposition to reengage with particular content or tasks over time and is characterized by positive feelings, more stored knowledge and more stored value for the content. An individual with a well-developed individual interest for particular content will autonomously favor that content over other activity accompanied by lesser phases of interest, and the individual is likely to be much less dependent on external factors such as the environment to sustain their interest (Hidi & Renninger, 2006).

In its earliest phases, interest is described as being primarily triggered or maintained by the environment (others, tasks, etc.), and in later phases, interest is more likely to be self-regulated. In later phases of interest development, the participant is more likely to initiate engagement, and to generate and seek answers to curiosity questions about content (Renninger, 2000). Of importance is the fact that interest is never entirely either extrinsically or intrinsically motivated. Rather, in each phase of interest development, interest reflects what the participant brings to the task, what the environment (others, objects, etc.) affords, and the way in which the participant is able to work with the environment.

The **four-phase model of interest development** (Hidi & Renninger, 2006; Renninger & Hidi, 2016) integrates two perspectives of situational interest and individual interest and their development:

Particular situations trigger interest, which can then develop across situations and over time to become more enduring. First, features of the environment (e.g., novelty, ambiguity, surprise) catch the person's attention. This situational interest can last longer, beyond a single situation,

if tasks seem meaningful and involving (i.e., if the student perceives the task as valuable or enjoyable). Over time, repeated experiences of triggered and maintained situational interest can develop into an emerging individual interest, such that the individual seeks opportunities to reengage with the object. For example, if the student who was originally fascinated by the Monet painting also enjoys the teacher's lecture about the Impressionist movement and then notices and appreciates the Monet reproductions on display at the dentist's office, the student may decide to Google Monet's paintings and order his biography from the library. Finally, this emerging individual interest can develop into a self-sustaining, well-developed, individual interest (e.g., the student visits art museums and majors in art history).

Progress through these phases requires an environment that supports individual pursuit of interests. For example, a school field trip to an art museum can foster a student's developing interest in art. As individuals progress through these developmental phases, their connection to the object of interest becomes more stable and generalizable. Interest development begins in a specific situation, but by the time those interests are well developed, individuals make conscious choices and pursue their interests autonomously (Renninger & Hidi, 2016). Indeed, as interest deepens across these four phases, individuals become increasingly aware of their own interest, as an important part of themselves (e.g., consider themselves Monet enthusiasts).

The four-phase model of interest development has implications for teaching practices:

First, the model contends that interest develops gradually and that external support (e.g., engaging lectures, school field trips) can foster interest. This also implies that, without external support, interest can go dormant or even be abandoned. Second, the model indicates that students at different stages of interest development may benefit from different types of external support. When students are unfamiliar with a topic, teachers may be able to create environments that catch their attention (e.g., by beginning a chemistry class with a demonstration of a chemical reaction). When students enter a situation with some pre-existing interest, however, teachers may be able to maintain those interests with interventions to expand their knowledge of the topic and solidify its perceived value. Thus, teachers can stimulate students' developing new interests in the first two phases (triggered and maintained situational interest), and maintain or strengthen interests for students in the second two phases (emerging and well-developed individual interest). In so doing, teachers can foster students' motivation and achievement.