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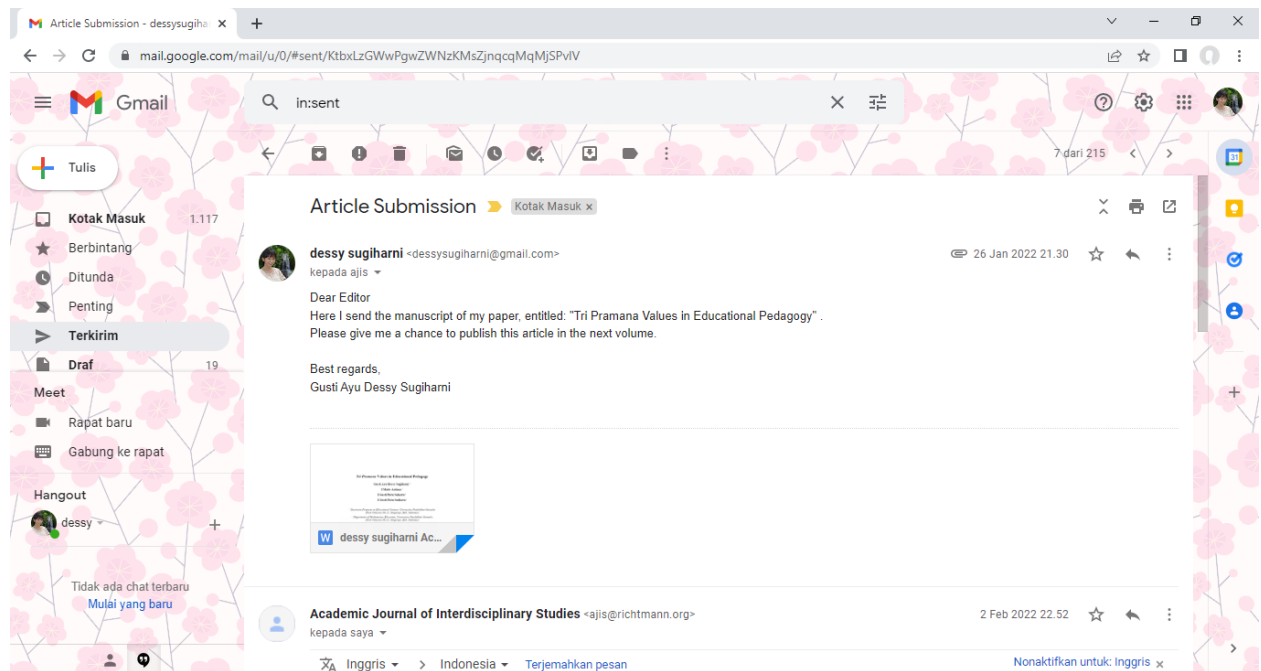
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# Tri Pramana Values in Educational Pedagogy

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## Abstract

*This paper aimed to discuss systematically the study of Tri Pramana values in learning. This paper was divided into three parts, namely: 1) Tri Pramana's position in education; 2) Actualization of Tri Pramana Values in Learning; and 3) This paper was closed by presenting a conclusion which was the answer to the problems raised from this paper. The writing method used literature study and comparative analysis. The results of the analysis showed that the position of the Tri Pramana learning concept is similar to the new version of Bloom's taxonomy. So that Tri Pramana can be interpreted as an approach to learning which consists of three parts (Sabda Pramana, Pratyaksha Pramana, and Anumana Pramana). The learning indicators found in Sabda Pramana (Agama Pramana) were "references and affirmations"; in Pratyaksha Pramana were "observation, asking questions, gathering information, processing information, and communicating"; and in Anumana Pramana were "summarizing, responding, linking, formulating, colligate". The Tri Pramana concept can be used as an improvement alternative of scientific approach applied to the current learning curriculum in Indonesia.*

**Keywords:** Tri Pramana– Values – Educational – Pedagogy

## 1. Introduction

The current learning process emphasizes effectiveness (Gonida et al., 2019). The authentic cooperative learning process is a strategy that is often used in contemporary learning. This strategy also helps strengthen collective learning which is very important to create critical power and awareness of students in preparing themselves to face the changes and challenges of the times (An & Mindrila, 2020). Changes in the environment and the market economy approach have implications for the growing demands for teacher professionalism (Junior et al., 2020). Teachers must be able to become learners throughout their careers to increase the effectiveness of the learning process in line with developments and environmental changes (Line, Curtis J., 2018). Teachers must teach based on professional standards to ensure the learning quality and have direct communication and also use technology effectively with students to support the development and improvement of educational quality (Okoye et al., 2020).

School is one of the places to support the educational quality development and improvement (Tang et al., 2020; To et al., 2020). Almost every day the students come and enter school to study and increase knowledge. However, most people are still confused by the difference between science and knowledge (Lidar et al., 2020). Indeed, science is knowledge, while knowledge is information obtained and everything that is known to humans (Minter, 2019). Science itself is knowledge in the form of information that is explored by humans (Matshedisho, 2020). So that humans are able to master that knowledge which becomes a science (Sekar, 2016). In essence, knowledge is based on the thought process where humans are thinking creatures (Snake-Beings, 2017). Thinking is an activity to find something that is considered true that can be used as knowledge (Can & Can, 2020). By knowing the truth we will find knowledge that can be accounted for openly to be debated and tested in order to achieve more definite knowledge (Small, 2020).

Hinduism has a very solid basic framework of truth because it makes sense and is conceptual. The concept of seeking the ultimate truth in Hinduism is described in a philosophical teaching called *Tattwa* (Chander, 2013; Long, 2018; Shama Rao & Kamath Burde, 2017). *Tattwa* in Hinduism can be fully absorbed by the human mind through several ways and approaches called *Pramana* (Mumford, 1997). There are three main ways of absorption which are called *Tri Pramana* in the teachings of Hinduism (Marutama et al., 2018). *Tri Pramana* causes human reason and understanding to accept the ultimate truth in *Tattwa*, so that it develops into belief and trust (Yoda, 2017). This belief and trust will form the new knowledge (Wolfe & Griffin, 2018).

The formation of new knowledge in the learning process will require an approach to find justification for that knowledge (Aigul et al., 2021). One of the success factors of learning is determined by the approach and method used by a teacher (Göktepe Yildiz & Göktepe Körpeoglu, 2019). Many approaches and learning methods can be used (Lovings et al., 2020). In this regard, teachers must be careful in choosing which approaches and methods are suitable for their environment (Marlatt, 2018). The learning approach is an idea or principle

of how to view in determining learning activities (Björklund et al., 2021). We can find this idea or principle in the values of *Tri Pramana* which is a series of activities that can be used as an approach to learning.

With regard to the above, it will be seen how the approach description to proving the truth of knowledge regarding the *Tri Pramana* values will be seen. That is whether it can complement the existing approach and it be a continuation of the previous approach, or is it an equation of the existing approach. With regard to various basic questions, as stated above, this paper systematically discusses the study of *Tri Pramana* values in learning. Thus this paper is divided into three parts. First is the position of *Tri Pramana* in education; the second is the actualization of the *Tri Pramana* values in learning. Then third, this paper is closed by presenting a conclusion which is the answer to the problems raised from this paper.

## 2. *Tri Pramana's* Position in Education

*Tri Pramana* is one of the teachings in the Hindu *Tattwa*. Hindus do proof of a justification of knowledge by applying the teachings of *Tri Pramana* (Seken & Badra, 2019). Etymologically *Tri Pramana* comes from the words "*Tri*" and "*Pramana*". *Tri* means three and *Pramana* means way. So "*Tri Pramana*" is three ways to know the truth in this case God Almighty (*Ida Sang Hyang Widhi*). By knowing about the existence of *Ida Sang Hyang Widhi*, then *Sraddha* or one's belief is getting stronger. Widiasih said the concept of *Tri Pramana* means three ways for Hindus to believe in the existence of *Ida Sang Hyang Widhi Wasa* (Widiasih, 2015). In *Widhi Tatwa* it is also mentioned that *Tri Pramana* is an effort to find out the nature of the truth of something, both real and abstract. According to Seken and Badra, *Tri Pramana* is three ways to find out the nature of the truth of something, both real and abstract. This *Tri Pramana* causes human reason and understanding to accept the ultimate truth in *Tattwa*, so that it develops into belief and trust. (Seken & Badra, 2019). According to Arjaya and Puspawati, *Tri Pramana* is 3 (three) ways of main absorption. *Tri Pramana*, "*Tri*" means three and "*Pramana*" means way or measure (Arjaya & Puspawati, 2017). According to Suardevyasa, *Tri Pramana* means three ways to get to the truth. So *Tri Pramana* is three ways to know the nature of the truth of something. The parts of *Tri Pramana* will support each other in a learning context (Suardevyasa, 2018). Based on some of the opinions above, it can be concluded in general that *Tri Pramana* is three learning techniques to build a belief in new knowledge of the existing truth.

*Wrhaspati Tattwa* sloka 26 mentions:

*"Pratyaksanumanasca krtan tad wacanagamah pramananitriwidamproktam tat samyajnanam uttamam. I kang sang kahanan dening pramana telu, ngaranya, pratyaksanumanagama".*

Meaning:

As for the person who is said to have three ways to gain knowledge, which is called *Pratyaksa*, *Anumana*, dan *Agama* (*Sabda*).

In relation to the nature of education, *Tri Pramana* can be used as an approach to achieve the three elements contained in education, namely educating, teaching, and training. (Ariestini et al., 2013; Redlo et al., 2020). Educating is an activity that is more aimed at developing character, conscience, enthusiasm, love, a sense of decency, piety, and others. (Reis & Formosinho, 2020). Teaching means giving lessons about sharing knowledge that is beneficial for the development of thinking skills (Maxwell, 2019). Training is an attempt to acquire skills by practicing something repeatedly so that there is a mechanism or habituation (Kazu & Is, 2018).

*Wrhaspati Tattwa* sloka 26 mentions:

*"Pratyaksa ngaranya katon kagamel. Anumana ngaranya kadyangganing anon kukus ring kadohan, yata manganuhingganing apuy, yeka Anumana ngaranya".*

Meaning:

*Pratyaksa* his name (because) looks (and) held. *Anumana* is called as seeing smoke in a distant place, to prove the certainty (of the existence of) fire, that is called *Anumana*.

As for the *Tri Pramana* relationship with the theory of education is where education is an activity that can only be done by humans (Jefferson et al., 2017). Education as a human activity can be observed as a practice in life (van As, 2019). Educational theory and practice are two things that cannot be separated, have a complementary relationship (complementary), complement each other (Tabensky, 2021). J.H. Gunning (Netherlands) once stated that "Theory without practice is a very special act (genius), whereas practice without theory is for a madman or criminal". According to Gunning, most educators need an intimate blend of the two (theory and practice) (Gunning, 2011).

*Wrhaspati Tattwa* sloka 26 mentions:

*"Agama ngaranya ikang aji inupapattyan desang guru, yeka Agama ngaranya. Sang kinahanan dening pramana telu Pratyaksanumanagama, yata sinagguh Samyajnana ngaranya".*

Meaning:

*Agama* (*Sabda*) is called knowledge given by teachers (scholars), that is said *Agama* (*Sabda*). The person, who has three ways to gain knowledge of *Pratyaksa*, *Anumana*, and *Agama* (*Sabda*), is called *Samyajnana* (all-knowing).

Thus *Tri Pramana* is related to the responsibility of education. Humans will not become humans if they do not live together with and in society (Thwaites, 2021). Individuals and society cannot be separated from each other, and need each other (Symeou & Karagiorgi, 2018). Education functions to improve the quality of human life, both as individuals and as groups in social life (Kern, 2020). The family

environment plays an important role in the development of his personality as a unit of mental life (Alam, 2018). In other words, the family is responsible for guiding the lives of individuals which is the basic capital for further development. So that humans as individuals can achieve the level and quality of life that a person might achieve in life.

Learning is the main activities in the educational process (Hansen et al., 2020). In Skinner's view, learning is the opportunity for an event to occur that triggers a learning response, either as a consequence as a reward or a reprimand or punishment (Johnson et al., 2017). Thus, the selection of a descriptive stimulus and the use of reinforcement can stimulate individuals to be more active in learning, so that learning is a relationship between stimulus and response. This is similar to *Wrhaspati Tattwa* sloka 16 which states:

*“Ikang citta hetu nikang atman pamukti swarga, citta hetu ning atma tibeng naraka, citta hetu pamukti swarga, citta hetu ning atma tibeng naraka, citta hetu nimittanyan pangdadi tiryak, citta hetunyan pangjanma manusa citta hetunya n pamanggihakan kamokasan mwang kalepasan, imittanya nihan”.*

Meaning:

Tranquility, heaven and hell, animal existence and human form, all these are produced by the power of the mind. The mind (*citta*) causes the *atma* to enjoy *moksha*. It is the mind that causes the *atman* to go to hell. Thought that cause to be born as an animal. Thought that cause to be born as a human. Thought that leads to attaining *moksha* and liberation.

From the description of the verse above, it is stated that the mind is the basic element that influences actions and leads individuals to happiness and misery. In other words, the relationship between stimulus and response will be formed according to the approach (*Pramana*) applied by a teacher. The weakness of Skinner's learning theory is that the response will be difficult to apply to complex behavior as a measure of the occurrence probability (Axe et al., 2019). This can be minimized in this *Tattwa* teaching. In *Wrhaspati Tattwa* sloka 16 it means that a teacher must be able to direct the mind power of students with learning rules as the law of cause and effect. So the response can be applied in various situations.

Gagne views that learning is influenced by internal factors and external factors interacting with each other. So that external conditions and internal conditions in the form of a state of individual cognitive processes will interact with each other in obtaining learning outcomes. These are categorized as motor skills, verbal information, intellectual abilities, cognitive strategies, and attitudes (Çetin & Solmaz, 2020). In this case, a weakness of this theory will emerge, namely that students cannot find their own learning style because in this theory, the learning is only oriented to the observed and measured results (Fang & Gagne, 2018). This weakness can be answered by *Wrhaspati Tattwa* sloka 21:

*“Yapwan pada gong nikang sattwa lawan rajah, yeka matangnyan mahyun mugawaya dhama denya, kedadi pwakang dharma denyu kalih, ya ta matangnyun mudih ring swarga, apan ikang sattwa mahyun ing gawe hayu, ikang rajah manglakwaken”*

Meaning:

If the *sattwam* and *rajah* are the same size, it causes them to want to practice dharma by them, both of them succeed in dharma, that causes them to return to heaven, because the *sattwam* wants to do good, the *rajah* does it.

The verse above states that individual happiness will be achieved if there is a balance between *sattwam* (intelligence) and *rajah* (discipline). Thus, this means that an approach (*pramana*) will be needed to strike a balance between intelligence and discipline. So that this will affect changes in individual behavior and then the weaknesses of Gagne's learning theory will be avoided.

Piaget views learning as a process of assimilation and accommodation of the association results with the environment and inappropriate observations between new information obtained with previously known information. Piaget explained about three ways for children to arrive at ways of knowing things, namely through social interaction, through physical knowledge and through mathematical logic (Hanfstingl et al., 2019). The same thing is also mentioned in *Wrhaspati Tattwa* sloka 16 and 26. The contents of this verse complement the weakness of Piaget's theory which is not able to explain the structure, process and cognitive function clearly. (Babakr et al., 2019). This verse implies that *Tri Pramana* is a medium that can be used to form cognitive structures, processes and functions by using the power of the mind.

According to Rogers' view, learning basically rests on the principle of freedom and individual differences in education. Thus, students will know themselves better, accept themselves as they are, and finally feel free to choose and act according to their individuality with full responsibility (Sutton & DeSantis, 2017). The same thing is also contained in *Wrhaspati Tattwa* sloka 56:

*“Nirdvandvan nirvikarañca nisafitamacalam tathi, Yadrūpath dhyayate nityañi, tad dhyānamigi kathyate. Ikang jñāna tan pangrwarwa, tatan wikāra, enak hēneng-heneng nira, umidēng sada tan kāwaranān, yeka dhyāna yoga ngaranya”.*

Meaning:

The mind is concentrated, not changing, calm and serene, still not shaken, not enveloped in anything, that's the name of *dhyana yoga*.

From the above verse, it is stated that concentration of mind and not being affected by any influence is one of the paths to happiness. In other words, believing in one's own abilities can be a way to achieve a goal. With regard to learning, an approach (*pramana*) is needed to be able to arouse students' self-confidence. *Tri Pramana* is an approach that is recommended in *Tattwa* to arouse students' confidence in knowledge. The existence of activities to prove the truth of knowledge in the *Tri Pramana* theory can be used as a basis for answering the weaknesses of Rogers' theory. Where the weakness of Rogers' theory is that it is individual, the learning process will not succeed if there is no motivation and a supportive environment. It is difficult to apply it in a more practical context. (Awang et al., 2020). This weakness is answered by the *Tri Pramana* concept in *Wrhaspati Tattwa* sloka 26. In this verse it means that by taking steps to prove the truth of knowledge through the *Tri Pramana* concept, confidence in that knowledge will be openly accounted for.

Bruner's view of learning can be described as a categorization approach. All individual interactions with nature will always involve the categories needed for the functioning of humans. Categorization simplifies complexity in individual environments (Rutten & Soetaert, 2013). The weakness of this learning theory is that this learning theory requires students to have mental readiness and maturity. Students

must be brave and willing to know their surroundings (Schapira et al., 2021). This weakness can be minimized with the help or instructions in the form of information from the teacher. This information can be contained in modules or textbooks that have been prepared before starting the lesson. The same thing is contained in *Wrhaspati Tattwa* sloka 26. With the existence of *Agama (sabda) pramana*, teachers and teaching texts will provide affirmations and references to initial knowledge and information as a basis for learning for students.

Learning in Bloom's view is basically a change in the quality of cognitive, affective and psychomotor abilities to improve the lives of students both as individuals and members of society as well as God's creatures. (Bertucio, 2017). In this regard, in *Wrhaspati tattwa* sloka 52 it is stated that there are three spiritual behaviors that humans must always strive for to achieve happiness, namely:

- 1) *Jnanabhyudireka*: have perfect wisdom or knowledge of nature. This has meaning in the cognitive domain if it is associated with Bloom's taxonomy. If the cognitive domain proposed by Bloom is up to the evaluation aspect, then this *Tattwa* teaching suggests a perfect cognitive realm. Thus, the characteristics of the *Tri Pramana* in this *Tattwa* teaching require the perfection of the evaluation aspect by producing something new related to the things that have been evaluated in the cognitive realm.
- 2) *Indria yoga marga*: trying not to be enchanted by worldly pleasures by controlling the senses through the path of *yoga*. This verse contains the affective domain linkage in Bloom's taxonomy. The advantage of this *Tattwa* teaching in the *Tri Pramana* characteristics is that there is a balance between aspects of self-control with confidence, in the affective domain.
- 3) *Trsna doksaya*: not attached to good or bad deeds. This verse is related to the psychomotor domain in Bloom's taxonomy. With regard to learning, this verse expresses the aspect of creativity in creating something that can be tested openly.

With regard to the description of the three spiritual behaviors mentioned above, it can be seen that part of the *Tri Pramana* characteristics has similarities with the new version of Bloom's taxonomy. Anderson and Krathwohl have made improvements to Bloom's taxonomy called the new version of Bloom's taxonomy (Abuhassna et al., 2020). The new version of Bloom's Taxonomy is parallel to the transformations that take place in 21st century education. This means that the actualization of the *Tri Pramana* values can be integrated in a lesson.

### 3. Actualization of *Tri Pramana* Values in Learning

The parts of the *Tri Pramana* consist of *Pratyaksa Pramana*, *Anumana Pramana*, and *Agama Pramana (Sabda Pramana)* (Suparya, 2021). If we contemplate deeply, all objects and events that become our knowledge and practice are actually all obtained through the *Tri Pramana*.

#### a. Sabda Pramana (Agama Pramana)

According to Suardeyasa, *Sabda Pramana (Agama Pramana)* is a way to get to the truth by believing in religious teachings that come from sacred literatures (Suardeyasa, 2018). According to Badra and Seken, *Sabda Pramana (Agama Pramana)* is a way to gain knowledge by believing in the notification or the words of the holy people (Seken & Badra, 2019). Utama et al. explained that *Sabda Pramana (Agama Pramana)* is a person's way of learning which is done by obtaining information directly from reliable learning sources (Utama et al., 2013). This way of learning optimally uses the potential of the language (voice) used, both orally and in writing.

According to Arjaya and Puspawati, *Sabda Pramana (Agama Pramana)* is a way of learning that is done by obtaining information directly from reliable learning sources (Arjaya & Puspawati, 2017). Widiasih said that the *Sabda Pramana (Agama Pramana)* is knowledge obtained through testimonies from people whose words are trusted, or from texts that are acknowledged to be true (Widiasih, 2015). As for the Hindu religion book for grade IV Elementary School in Bali, it is stated that there are 2 types of testimony (Saputra & Sujaya, 2019):

- 1) *Laukika Sabda* : testimonies obtained from trusted people and their testimonies can be accepted by common sense. In other words, if it is associated with the learning process, it means that this section is an activity of listening to lectures and discussion activities.
- 2) *Vaidika Sabda* : testimony based on the sacred Vedic texts. In other words, if it is related to the learning process, it means that this section is an activity to study textbooks, modules, and texts related to learning materials.

Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this part of *Sabda Pramana (Agama Pramana)* can be related to C1 (Knowledge) and C2 (Understanding) in the Cognitive domain. This C1 (Knowledge) will be related to *Vaidika Sabda*. In other words, the cognitive domain in the knowledge aspect will be achieved when students read, mark, study, and memorize the learning materials contained in learning texts. Then C2 (Understanding) will be related to *Laukika Sabda*. That is, the cognitive domain in the aspect of understanding will be achieved when students discuss, associate, estimate, compare, and summarize the learning materials proposed by the teacher with all students (Stanny, 2016). In the Affective domain, the *Sabda Pramana (Agama Pramana)* section can be associated with A1 (Acceptance) and A2 (Responsive): This A1 (Acceptance) will be related to both *Laukika* and *Vaidika Sabda*. Thus, the affective domain in the acceptance aspect will be achieved when students listen, choose, question, and follow the learning materials, both those contained in the learning texts and those presented by the teacher. Then A2 (Responsive) will be related to *Laukika Sabda*. That is, the affective domain in the responsive aspect will be achieved when students answer, discuss, agree, or reject the learning materials proposed by the teacher (Bertucio, 2017). Furthermore, in the Psychomotor domain, *Sabda Pramana (Agama Pramana)* section can be related to P1 (Replication). This P1 (Replication) will relate to both *Laukika* and *Vaidika Sabda*. This means that the psychomotor domain in the replication aspect will be achieved when students imitate, follow, and repeat what is learned from the teacher and texts related to learning materials (Spindler, 2020).

Based on the explanation above, it can be concluded that the learning indicators from the *Sabda Pramana (Agama Pramana)* are "references and affirmations". Reference is intended as a reference or reference source for knowledge obtained from studying learning texts. While Affirmations are intended for strengthening of knowledge obtained from learning discussions based on what is confirmed by the teacher.

#### b. Pratyaksa Pramāna

According to Suardeyasa, *Pratyaksa Pramana* is a technique to get to the truth by observing the condition of a fact (Suardeyasa, 2018). According to Badra and Seken, *Pratyaksa Pramana* is a way to gain knowledge by paying attention and seeing directly (Seken & Badra, 2019). According to Arjaya, *Pratyaksa Pramana* is a way of learning that is done by direct observation of the subject matter (Arjaya & Puspawati, 2017).

Utama et al. explained that in *Pratyaksa Pramana*, students' physical condition is highly demanded in learning because students are physically involved directly with the material being studied (Utama et al., 2013). In addition, the strength of prior knowledge affects the freedom to make observations and has implications for the results of observations. Observations of the same object can give different results if done by different people. Widiasih mentions that *Pratyaksa Pramāna* is about direct observation through the five senses with the object being observed, thus giving knowledge about objects, according to their circumstances (Widiasih, 2015). *Pratyaksa Pramāna* consists of 2 levels of observation, which are listed in the Hindu religion book grade IV Elementary School in Bali, namely (Saputra & Sujaya, 2019):

- 1) *Nirwikalpa Pratyaksa* unspecified observation, observation of an object without judgment, without association with a subject.
- 2) *Savikalpa Pratyaksa* determined or differentiated observations, observations of an object are accompanied by the introduction of characteristics, nature, sizes, types and also the subject.

Knowledge is said to be true if the description of the stated properties matches the observed object. In addition to observing real objects, the *Pratyaksa Pramāna* also teaches that both non-existent and unreal objects can also be observed. Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this *Pratyaksa Pramana* section can be related to C1 (Knowledge), C2 (Understanding), C3 (Application), C4 (Analysis) and C5 (Synthesis) in the Cognitive domain. The cognitive domain in the C1 (Knowledge) aspect will be achieved when students recall the learning materials contained in learning texts as well as those confirmed by the teacher. This is then associated with studying, identifying, reviewing and exploring real objects that are used as sources of information in learning. Aspects of C2 (Understanding) will be achieved when students explore information, detail, associate, compare and generalize the information obtained on real objects that are used as learning resources. Furthermore, the C3 (Application) aspect will be achieved when students investigate, relate, implement and modify the information contained in learning texts as well as those confirmed by the teacher with real objects that are used as learning resources. Then the C4 (Analysis) aspect will be achieved when students combine the information contained in learning texts as well as those confirmed by the teacher with the results of detection, diagnosis and selection of real objects that are used as learning resources. And the C5 (Synthesis) aspect will be achieved when students generalize and conclude various information both from real objects that are used as learning resources, learning texts, and learning affirmed by the teacher (Stanny, 2016).

In the Affective domain, the *Pratyaksa Pramāna* section can be related to A2 (Responsive) and A3 (the value adopted). The A2 (Responsive) aspect will be achieved when students interpret and practice the information contained in learning texts as well as those confirmed by the teacher on real objects that are used as learning resources. Then the A3 aspect (the value adopted) will be achieved when students justify, clarify and complete the information contained in the learning texts as well as those confirmed by the teacher with information obtained from real objects that are used as learning resources (Bertucio, 2017).

Furthermore, in the Psychomotor domain, the *Pratyaksa Pramana* section can be associated with P1 (Replication), P2 (Manipulation), P3 (Determination) and P4 (Articulation). This P1 (imitation) aspect will be achieved when students position, combine, and replicate the information contained in learning texts as well as those confirmed by the teacher with information obtained from real objects that are used as learning resources. Then the P2 (Manipulation) aspect will be achieved when students identify, manipulate and demonstrate various information obtained from real objects that are used as learning resources. Furthermore, the P3 aspect (determination) will be achieved when students refine and calibrate the information contained in learning texts as well as those confirmed by the teacher with information based on controlling real objects that are used as learning resources. And the P4 (articulation) aspect will be achieved when students integrate, combine, and modify various information obtained from real objects that are used as learning resources (Spindler, 2020). Based on the explanation above, *Pratyaksa Pramana* can be said to have the same position as the scientific approach. So that the decrease in learning indicators from *Pratyaksa Pramana* is observation, asking questions, gathering information, processing information, and communicating.

### **c. Anumana Pramāna**

According to Suardeyasa, *Anumana Pramana* is a way to get to the truth by making comparisons, drawing conclusions from causal relationships, and comparing one object to another based on generally accepted laws in the universe (Suardeyasa, 2018). According to Badra and Seken, *Anumana Pramana* is a way to gain knowledge by drawing conclusions from the analysis process or analyzing to get a conclusion (Seken & Badra, 2019). According to Arjaya, *Anumana Pramana* is a way of learning that is done by reasoning on material that cannot be reached directly (Arjaya & Puspawati, 2017).

Utama et al explained that *Anumana Pramana* is a person's way of learning which is done by way of reasoning on subject matter that cannot be reached directly (Utama et al., 2013). Reasoning on the subject matter is done based on previous knowledge and experience, namely by drawing conclusions based on previous knowledge and experience. Widiasih said that *Anumana Pramana* is a way of gaining knowledge based on logical conclusions (Widiasih, 2015). Where the conclusion is the result obtained by the existence of an intermediary between the subject and object. As for the Hindu religion book for grade IV Elementary School in Bali it states that the conclusion process to *Anumana Pramana* goes through several stages, namely as follows (Saputra & Sujaya, 2019):

- 1) *Pratijñā*, is the first process: introducing the object of the problem about the truth of observation;
- 2) *Hetu*, is the second process: the reason for the conclusion;
- 3) *Udaharana*, is the third process: linking the general rule to a problem;
- 4) *Upanaya*, is the fourth process: the use of general rules in the reality seen;
- 5) *Nigamana*, is the fifth process: in the form of a true and definite conclusion from the entire previous process.

## **4. Discussion**

Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this part of *Anumana Pramana* can be related to the Cognitive domain in the C6 (Evaluation) aspect, namely *Pratijñā*, *Hetu*, *Daharana* and *Upanaya*, then the C5 (Synthesis) aspect, namely *Nigamana*. The cognitive domain in the C6 (Evaluation) aspect will be achieved when students coordinate, prove, and validate various information obtained from the projection of real objects that are used as sources of information in learning. Then the C5 (Synthesis) aspect here is not only to conclude, but also to the process of creating. So that the C5 (Synthesis) aspect will be achieved when students produce, create and construct new information based on the formulation of various information from real objects that are used as sources of information in learning (Stanny, 2016). In the Affective domain, the *Anumana Pramāna* section can be related to A4

(Characteristics). Aspect A4 (Characteristics) will be achieved when students revise, modify, and practice various information from real objects that are used as learning resources (Bertucio, 2017). Furthermore, in the Psychomotor domain, the *Anumana Pramana* section can be associated with P4 (Articulation) and P5 (Naturalist). Aspects of P4 (Articulation) will be achieved when students sharpen and adapt information from real objects that are used as learning resources. Then the P5 (Naturalist) aspect will be achieved when students specify, manage and design new information based on real objects that are used as learning resources (Spindler, 2020). Based on the explanation above, it can be concluded that the learning indicators from *Anumana Pramana* are "summarizing, responding, linking, formulating, and colligate". With regard to the actualization of *Tri Pramana* values in learning, a mapping of the *Tri Pramana* parts with Bloom's Taxonomy can be formed. The following mapping can be seen in Table 1.

Table 1. Mapping of *Tri Pramana* with Bloom's Taxonomy

<i>Tri Pramana</i>	Bloom's Taxonomy	Cognitive	Affective	Psychomotor
<i>Sabda Pramana</i>		(C1) Knowledge (C2) Understanding	(A1) Acceptance (A2) Responsive	(P1) Replication
<i>Pratyaksa Pramana</i>		(C1) Knowledge (C2) Understanding (C3) Application (C4) Analysis (C5) Synthesis	(A2) Responsive (A3) The value adopted	(P1) Replication (P2) Manipulation (P3) Determination (P4) Articulation
<i>Anumana Pramana</i>		(C6) Evaluation (C5) Synthesis (Creating)	(A4) Characteristics	(P4) Articulation (P5) Naturalist

#### a. *Tri Pramana* Concept-based Learning Scenario

*Tri Pramana* has an understanding as a technical approach or method or approach used to gain knowledge. Where this *Tri Pramana* can be mapped with Bloom's taxonomy and bring up some indicators from the parts of this *Tri Pramana*. In this regard, it is possible to outline a learning scenario based on the *Tri Pramana* concept. These scenarios can be seen in Table 2, Table 3, and Table 4.

Table 2. Learning Scenarios of the *Sabda Pramana (Agama Pramana)* stage

Indicator	Teacher Activities	Student Activities
Reference	Distributes learning texts.	Responding to the material learned from learning texts.
Affirmation	Explaining learning materials that are integrated into real objects as the basis of information source on learning.	Listening and verifying learning materials that will be applied when identifying real objects that are used as sources of information.

Table 3 Learning Scenarios of the *Pratyaksa Pramana* stage

Indicator	Teacher Activities	Student Activities
Observation	In identifying real objects that are used as sources of information, a collaborative learning is carried out. In this case the teacher accompanies students in observing real objects that are used as sources of information in order to understand the learning materials contained therein.	Students observe real objects that are used as sources of information to understand the learning materials contained therein.
Asking Questions	The teacher asks or gives feedback to students.	Students ask questions to get clarity on the learning material contained in real objects that are used as sources of information. "Question" is not always in the form of a "question sentence," but can also be in the form of a statement, as long as both want a verbal response.
Gathering Information	The teacher accompanies students and provides stimulation to students so that students do the reasoning process.	Students do reasoning on the learning materials contained in real objects that are used as sources of information.
Processing Information	The teacher accompanies students and provides stimulation to students so that students do information processing.	Student process information about learning materials obtained from real objects that are used as sources of information.
Communicating	The teacher accompanies students in making presentations on information	Students make presentations on information about learning materials that they get from

about learning materials that they get from real objects that are used as information sources. real objects that are used as sources of information.

Table 4 Learning Scenarios of the *Anumana Pramana* stage

Indicator	Teacher Activities	Student Activities
Summarizing	Teachers accompany and motivate students.	Students introduce the object of the problem about the truth of the observation.
Responding	Teachers accompany and motivate students.	Students state the reasons for the conclusion.
Linking	Teachers accompany and motivate students.	Students relate general rules to real objects that are used as sources of information with a learning problem.
Formulating	Teachers accompany and motivate students.	Students use general rules in the reality they see.
Colligate	Teachers accompany and motivate students.	Students make correct and definite conclusions from the entire previous process. This final conclusion will be in the form of a case made by each student and equipped with a form of problem solving (to be used as a question bank development).

## 5. Conclusion

In relation to learning pedagogy, the position of the *Tri Pramana* concept has similarities with the new version of Bloom's taxonomy. So the *Tri Pramana* can be interpreted as an approach in learning which consists of three parts (*Sabda Pramana* (*Agama Pramana*), *Pratyaksa Pramana*, and *Anumana Pramana*). *Sabda Pramana* (*Agama Pramana*) is the initial stage or the stage for beginners who are just learning, namely the theoretical stage, where a person learns preliminary knowledge with outward learning techniques. This outward learning technique is to study the existing material, both from books and teacher lectures by utilizing their intellectual intelligence. *Sabda Pramana* (*Agama Pramana*) can be reduced to several indicators in finding justification for learning. This indicator will be able to prepare students before heading to the stages of activities in the scientific approach. The indicators in the *Sabda Pramana* (*Agama Pramana*) are "references and affirmations". *Pratyaksa Pramana* is the stage of knowing, experiencing and attaining knowledge through sensory awareness by experiencing the cosmic connectedness of the knowledge learned directly. *Pratyaksa Pramana* can be reduced to several indicators in finding justification for learning. This indicator covers all stages of activities in the scientific approach. The indicators for *Pratyaksa Pramana* are "observation, asking questions, gathering information, processing information, and communicating". *Anumana Pramana* is the stage of concluding the knowledge gained by self-learning techniques, namely learning techniques by utilizing deep wisdom that requires clarity of mind, sensitivity of feelings, and sharpness of intuition. Based on the meaning explanation of *Anumana Pramana*, it can be reduced to several indicators in finding justification for learning. These indicators will be able to complete the stages of activities in the scientific approach. The indicators in *Anumana Pramana* are summarizing, responding, linking, formulating, colligate. The ultimate goal of applying *Tri Pramana* values in learning does not stop only until students are able to solve problems. The ultimate goal of applying *Tri Pramana* values in mathematics learning is when students are able to make or create a new case in their learning and find solutions to the problem. Cases and problem solving found by students can be used to enrich the question bank of a lesson. Based on the decrease in indicators related to learning activities from each part of *Tri Pramana*, the *Tri Pramana* concept can be used as an alternative to complete the scientific approach in learning that is applied to the current learning curriculum in Indonesia.

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## BUKTI HASIL REVIEW (2 APRIL 2022)

	<p>Academic Journal of Interdisciplinary Studies ISSN 2281-3993 (print) ISSN 2281-4612 (online)</p> <p><b>PAPER REVIEW FORM</b></p>	<p>This Journal is indexed by <b>Scopus</b></p>																		
<p><b>Referee</b> : -</p> <p><b>First author</b> : Gusti Ayu Dessy Sugiharni</p> <p><b>Title</b> : Tri Pramana Values in Educational Pedagogy</p> <p><i>Note: The name of referee will be deleted when this report is sent back to the author(s).</i></p>																				
<p><b>Comments About Paper:</b></p>																				
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Aspects of the paper	Comments	Need revision?																		
Abstract	<ul style="list-style-type: none"><li>• The aim and scope of the paper are clearly stated in the abstract.</li></ul>	No																		
Introduction and Literature Review	<ul style="list-style-type: none"><li>• The introduction provides relevant background information and the main issue is contextualized clearly.</li><li>• The scope, context, and significance of the research have been conducted by summarizing current understanding and background information about the topic, stating the purpose of the work. It is explained briefly the methodological approach used to examine the research problem, highlighting the potential outcomes of the study that can reveal.</li><li>• The review of the existing literature covers all relevant aspects of the study and the problem is established clearly in the literature review</li></ul>	No																		
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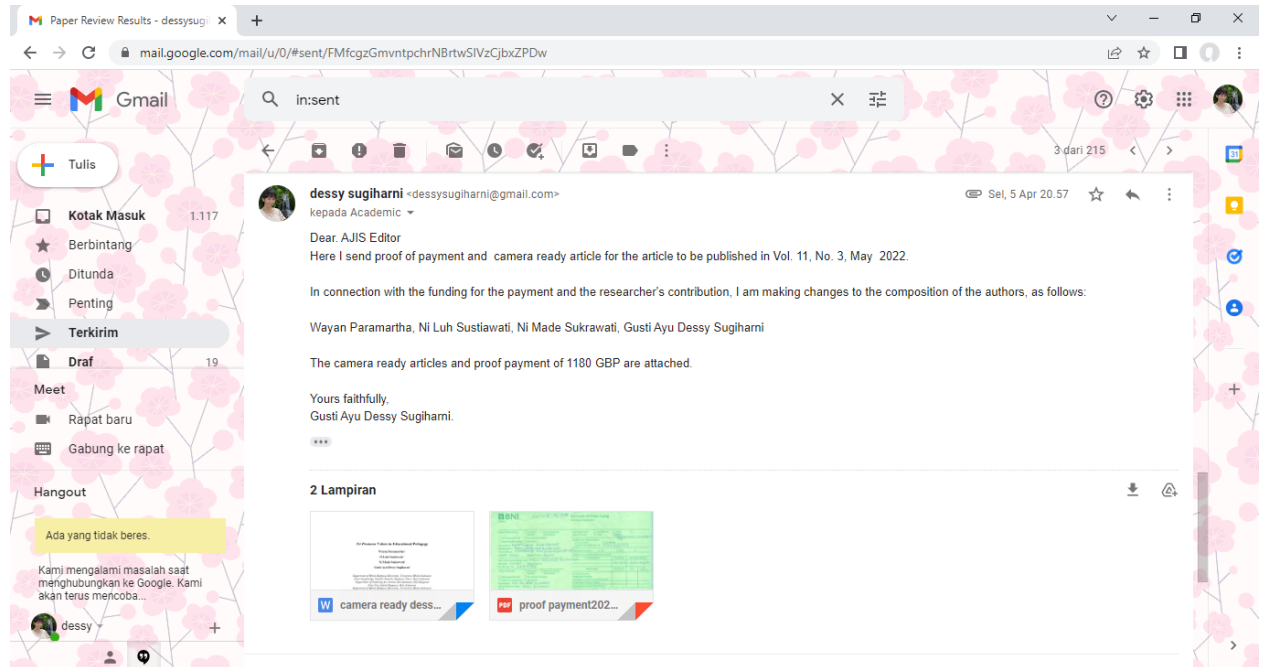
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## BUKTI SUDAH UPLOAD REVISI (5 APRIL 2022)



## Tri Pramana Values in Educational Pedagogy

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### Abstract

*This paper aimed to discuss systematically the study of Tri Pramana values in learning. This paper was divided into three parts, namely: 1) Tri Pramana's position in education; 2) Actualization of Tri Pramana Values in Learning, and 3) This paper was closed by presenting a conclusion which was the answer to the problems raised from this paper. The writing method used literature study and comparative analysis. The results of the analysis showed that the position of the Tri Pramana learning concept is similar to the new version of Bloom's taxonomy. So that Tri Pramana can be interpreted as an approach to learning that consists of three parts (Sabda Pramana, Pratyaksha Pramana, and Anumana Pramana). The learning indicators found in Sabda Pramana (Agama Pramana) were "references and affirmations"; in Pratyaksha Pramana were "observation, asking questions, gathering information, processing information, and communicating"; and in Anumana Pramana were "summarizing, responding, linking, formulating, colligate". The Tri Pramana concept can be used as an improved alternative to the scientific approach applied to the current learning curriculum in Indonesia.*

**Keywords:** Tri Pramana– Values – Educational – Pedagogy

## 6. Introduction

The current learning process emphasizes effectiveness (Gonida et al., 2019). The authentic cooperative learning process is a strategy that is often used in contemporary learning. This strategy also helps strengthen collective learning which is very important to create critical power and awareness for students in preparing themselves to face the changes and challenges of the times (An & Mindrila, 2020). Changes in the environment and the market economy approach have implications for the growing demands for teacher professionalism (Junior et al., 2020). Teachers must be able to become learners throughout their careers to increase the effectiveness of the learning process in line with developments and environmental changes (Line, Curtis J., 2018). Teachers must teach based on professional standards to ensure the learning quality and have direct communication and also use technology effectively with students to support the development and improvement of educational quality (Ariawan et al., 2018; Okoye et al., 2020; Sugiharni et al., 2018).

School is one of the places to support educational quality development and improvement (Tang et al., 2020; To et al., 2020). Almost every day the students come and enter school to study and increase knowledge. However, most people are still confused by the difference between science and knowledge (Lidar et al., 2020). Indeed, science is knowledge, while knowledge is information obtained and everything that is known to humans (Minter, 2019). Science itself is knowledge in the form of information that is explored by humans (Matshedisho, 2020). So that humans can master that knowledge which becomes a science (Sekar, 2016). In essence, knowledge is based on the thought process where humans are thinking creatures (Snake-Beings, 2017). Thinking is an activity to find something that is considered true that can be used as knowledge (Can & Can, 2020). By knowing the truth we will find the knowledge that can be accounted for openly to be debated and tested to achieve more definite knowledge (Small, 2020).

Hinduism has a very solid basic framework of truth because it makes sense and is conceptual. The concept of seeking the ultimate truth in Hinduism is described in philosophical teaching called *Tattwa* (Chander, 2013; Long, 2018; Shama Rao & Kamath Burde, 2017). *Tattwa* in Hinduism can be fully absorbed by the human mind through several ways and approaches called *Pramana* (Mumford, 1997). There are three main ways of absorption which are called *Tri Pramana* in the teachings of Hinduism (Marutama et al., 2018). *Tri Pramana* causes human reason and understanding to accept the ultimate truth in *Tattwa* so that it develops into belief and trust (Yoda, 2017). This belief and trust will form the new knowledge (Wolfe & Griffin, 2018).

The formation of new knowledge in the learning process will require an approach to find justification for that knowledge (Aigul et al., 2021). One of the success factors of learning is determined by the approach and method used by a teacher (Göktepe Yıldız & Göktepe Körpeoglu, 2019). Many approaches and learning methods can be used (Lovings et al., 2020). In this regard, teachers must be careful in choosing which approaches and methods are suitable for their environment (Marlatt, 2018). The learning approach is an idea or principle of how to view determining learning activities (Björklund et al., 2021). We can find this idea or principle in the values of *Tri Pramana* which is a series of activities that can be used as an approach to learning.

Concerning the above, it will be seen how the approach description to proving the truth of knowledge regarding the *Tri Pramana* values will be seen. That is whether it can complement the existing approach and it is a continuation of the

previous approach, or is it an equation of the existing approach. Concerning various basic questions, as stated above, this paper systematically discusses the study of Tri Pramana values in learning. Thus this paper is divided into three parts. First is the position of Tri Pramana in education; the second is the actualization of the Tri Pramana values in learning. Then third, this paper is closed by presenting a conclusion which is the answer to the problems raised in this paper.

## 7. *Tri Pramana's Position in Education*

*Tri Pramana* is one of the teachings in the Hindu *Tattwa*. Hindus do proof of a justification for knowledge by applying the teachings of *Tri Pramana* (Seken & Badra, 2019). Etymologically *Tri Pramana* comes from the words "*Tri*" and "*Pramana*". *Tri* means three and *Pramana* mean way. So "*Tri Pramana*" is three ways to know the truth in this case God Almighty (*Ida Sang Hyang Widhi*). By knowing about the existence of *Ida Sang Hyang Widhi*, then *Sraddha* or one's belief is getting stronger. Widiasih said the concept of *Tri Pramana* means three ways for Hindus to believe in the existence of *Ida Sang Hyang Widhi Wasa* (Widiasih, 2015). In *Widhi Tatwa* it is also mentioned that *Tri Pramana* is an effort to find out the nature of the truth of something, both real and abstract. According to Seken and Badra, *Tri Pramana* is three ways to find out the nature of the truth of something, both real and abstract. This *Tri Pramana* causes human reason and understanding to accept the ultimate truth in *Tattwa* so that it develops into belief and trust. (Seken & Badra, 2019). According to Arjaya and Puspawati, *Tri Pramana* is 3 (three) ways of the main absorption. *Tri Pramana*, "*Tri*" means three, and "*Pramana*" means way or measure (Arjaya & Puspawati, 2017). According to Suardevyasa, *Tri Pramana* means three ways to get to the truth. So *Tri Pramana* is three ways to know the nature of the truth of something. The parts of *Tri Pramana* will support each other in a learning context (Suardevyasa, 2018). Based on some of the opinions above, it can be concluded in general that *Tri Pramana* is three learning techniques to build a belief in new knowledge of the existing truth.

*Wrhaspati Tattwa* sloka 26 mentions:

*"Pratyaksanumanasca krtan tad wacanagamah pramananitriwidamproktam tat samyajnana uttamam. Ikaṅ sang kahanan dening pramana telu, ngaranya, pratyaksanumanagama"*.

Meaning:

As for the person who is said to have three ways to gain knowledge, which is called *Pratyaksa*, *Anumana*, and *Agama* (*Sabda*).

Concerning the nature of education, *Tri Pramana* can be used as an approach to achieve the three elements contained in education, namely educating, teaching, and training. (Ariestini et al., 2013; Redlo et al., 2020). Educating is an activity that is more aimed at developing character, conscience, enthusiasm, love, a sense of decency, piety, and others. (Reis & Formosinho, 2020). Teaching means giving lessons about sharing knowledge that is beneficial for the development of thinking skills (Maxwell, 2019). Training is an attempt to acquire skills by practicing something repeatedly so that there is a mechanism or habituation (Kazu & Is, 2018).

*Wrhaspati Tattwa* sloka 26 mentions:

*"Pratyaksa ngaranya katon kagemel. Anumana ngaranya kadyangganing anon kukus ring kadohan, yata manganuhingganing apuy, yeka Anumana ngaranya"*.

Meaning:

*Pratyaksa* his name (because) looks (and) held. *Anumana* is called seeing smoke in a distant place, to prove the certainty (of the existence of) fire, that is called *Anumana*.

The *Tri Pramana* relationship with the theory of education is that education is an activity that can only be done by humans (Jefferson et al., 2017). Education as human activity can be observed as a practice in life (van As, 2019). Educational theory and practice are two things that cannot be separated, have a complementary relationship (complimentary), and complement each other (Tabensky, 2021). J.H. Gunning (Netherlands) once stated that "Theory without practice is a very special act (genius), whereas practice without theory is for a madman or criminal". According to Gunning, most educators need an intimate blend of the two (theory and practice) (Gunning, 2011).

*Wrhaspati Tattwa* sloka 26 mentions:

*"Agama ngaranya ikaṅ aji inupapattyan desang guru, yeka Agama ngaranya. Sang kinahanan dening pramana telu Pratyaksanumanagama, yata sinagguh Samyajnana ngaranya"*.

Meaning:

*Agama* (*Sabda*) is called knowledge given by teachers (scholars), that is said *Agama* (*Sabda*). The person, who has three ways to gain knowledge of *Pratyaksa*, *Anumana*, and *Agama* (*Sabda*), is called *Samyajnana* (all-knowing).

Thus *Tri Pramana* is related to the responsibility of education. Humans will not become humans if they do not live together with and in society (Thwaites, 2021). Individuals and society cannot be separated from each other, and need each other (Symeou & Karagiorgi, 2018). Education functions to improve the quality of human life, both as individuals and as groups in social life (Kern, 2020). The family environment plays an important role in the development of his personality as a unit of mental life (Alam, 2018). In other words, the family is responsible for guiding the lives of individuals which is the basic capital for further development. So that humans as individuals can achieve the level and quality of life that a person might achieve in life.

Learning is the main activity in the educational process (Hansen et al., 2020). In Skinner's view, learning is the opportunity for an event to occur that triggers a learning response, either as a consequence as a reward or a reprimand, or punishment (Johnson et al., 2017). Thus, the selection of a descriptive stimulus and the use of reinforcement can stimulate individuals to be more active in learning, so that learning is a relationship between stimulus and response. This is similar to *Wrhaspati Tattwa* sloka 16 which states:

"*Ikang citta hetu nikang atman pamukti swarga, citta hetu ning atma tibeng naraka, citta hetu pamukti swarga, citta hetu ning atma tibeng naraka, citta hetu nimittanyan pangdadi tiryak, citta hetunyan pangjanma manusa citta hetunya n pamanggihakan kamokasan mwang kalepasan, imittanya nihan*".

Meaning:

Tranquility, heaven and hell, animal existence, and human form, all these are produced by the power of the mind. The mind (*Citta*) causes the *atma* to enjoy *moksha*. It is the mind that causes the *atman* to go to hell. Thought that cause to be born as an animal. Thought that cause to be born as a human. Thought that leads to attaining *moksha* and liberation.

From the description of the verse above, it is stated that the mind is the basic element that influences actions and leads individuals to happiness and misery. In other words, the relationship between stimulus and response will be formed according to the approach (*Pramana*) applied by a teacher. The weakness of Skinner's learning theory is that the response will be difficult to apply to complex behavior as a measure of the occurrence probability (Axe et al., 2019). This can be minimized in this *Tattwa* teaching. In *Wrhaspati Tattwa sloka 16* it means that a teacher must be able to direct the mind power of students with learning rules as the law of cause and effect. So the response can be applied in various situations.

Gagne views that learning is influenced by internal factors and external factors interacting with each other. So that external conditions and internal conditions in the form of a state of individual cognitive processes will interact with each other in obtaining learning outcomes. These are categorized as motor skills, verbal information, intellectual abilities, cognitive strategies, and attitudes (Çetin & Solmaz, 2020). In this case, a weakness of this theory will emerge, namely that students cannot find their learning style because, in this theory, the learning is only oriented to the observed and measured results (Fang & Gagne, 2018). This weakness can be answered by *Wrhaspati Tattwa sloka 21*:

"*Yapwan pada gong nikang sattwa lawan rajah, yeka matangnyan mahyun mugawaya dhama denya, kedadi pwakang dharma denyu kalih, ya ta matangnyun mudih ring swarga, apan ikang sattwa mahyun ing gawe hayu, ikang rajah manglakwaken*"

Meaning:

If the *sattwam* and *rajah* are the same sizes, it causes them to want to practice dharma by them, both of them succeed in dharma, which causes them to return to heaven because the *sattwam* wants to do good, the *rajah* does it.

The verse above states that individual happiness will be achieved if there is a balance between *sattwam* (intelligence) and *rajah* (discipline). Thus, this means that an approach (*pramana*) will be needed to strike a balance between intelligence and discipline. So that this will affect changes in individual behavior and then the weaknesses of Gagne's learning theory will be avoided.

Piaget views learning as a process of assimilation and accommodation of the association results with the environment and inappropriate observations between new information obtained with previously known information. Piaget explained about three ways for children to arrive at ways of knowing things, namely through social interaction, physical knowledge, and mathematical logic (Hanfstingl et al., 2019). The same thing is also mentioned in *Wrhaspati Tattwa sloka 16* and *26*. The contents of this verse complement the weakness of Piaget's theory which is not able to explain the structure, process, and cognitive function clearly. (Babakr et al., 2019). This verse implies that *Tri Pramana* is a medium that can be used to form cognitive structures, processes, and functions by using the power of the mind.

According to Rogers' view, learning rests on the principle of freedom and individual differences in education. Thus, students will know themselves better, accept themselves as they are, and finally feel free to choose and act according to their individuality with full responsibility (Sutton & DeSantis, 2017). The same thing is also contained in *Wrhaspati Tattwa sloka 56*:

"*Nirdvandvan nirvikarañca nisafitamacalam tathi, Yadrūpath dhyayate nityañi, tad dhyānamigi kathyate. Ikang jñāna tan pangrwarwa, tatan wikāra, enak hēneng-heneng nira, umidēng sada tan kāwaranān, yeka dhyāna yoga ngaranya*".

Meaning:

The mind is concentrated, not changing, calm and serene, still not shaken, not enveloped in anything, that's the name of *dhyana yoga*.

From the above verse, it is stated that concentration of mind and not being affected by any influence is one of the paths to happiness. In other words, believing in one's abilities can be a way to achieve a goal. Concerning learning, an approach (*pramana*) is needed to be able to arouse students' self-confidence. *Tri Pramana* is an approach that is recommended in *Tattwa* to arouse students' confidence in knowledge. The existence of activities to prove the truth of knowledge in the *Tri Pramana* theory can be used as a basis for answering the weaknesses of Rogers' theory. Where the weakness of Rogers' theory is that it is individual, the learning process will not succeed if there is no motivation and a supportive environment. It is difficult to apply it in a more practical context. (Awang et al., 2020). This weakness is answered by the *Tri Pramana* concept in *Wrhaspati Tattwa sloka 26*. This verse means that by taking steps to prove the truth of knowledge through the *Tri Pramana* concept, confidence in that knowledge will be openly accounted for.

Bruner's view of learning can be described as a categorization approach. All individual interactions with nature will always involve the categories needed for the functioning of humans. Categorization simplifies complexity in individual environments (Rutten & Soetaert, 2013). The weakness of this learning theory is that this learning theory requires students to have mental readiness and maturity. Students must be brave and willing to know their surroundings (Schapira et al., 2021). This weakness can be minimized with help or instructions in the form of information from the teacher. This information can be contained in modules or textbooks that have been prepared before starting the lesson. The same thing is contained in *Wrhaspati Tattwa sloka 26*. With the existence of *Agama (sabda) pramana*, teachers and teaching texts will provide affirmations and references to initial knowledge and information as a basis for learning for students.

Learning in Bloom's view is a change in the quality of cognitive, affective, and psychomotor abilities to improve the lives of students both as individuals and members of society as well as God's creatures. (Bertucio, 2017). In this regard, in *Wrhaspati tattwa sloka 52* it is stated that there are three spiritual behaviors that humans must always strive for to achieve happiness, namely:

- 4) *Jnanabhyudireka*: have perfect wisdom or knowledge of nature. This has meaning in the cognitive domain if it is associated with Bloom's taxonomy. If the cognitive domain proposed by Bloom is up to the evaluation aspect, then this *Tattwa* teaching suggests a perfect cognitive realm. Thus, the characteristics of the *Tri Pramana* in this *Tattwa* teaching require the perfection of the evaluation aspect by producing something new related to the things that have been evaluated in the cognitive realm.



- 5) *Indria yoga marga*: trying not to be enchanted by worldly pleasures by controlling the senses through the path of *yoga*. This verse contains the affective domain linkage in Bloom's taxonomy. The advantage of this *Tattwa* teaching in the *Tri Pramana* characteristics is that there is a balance between aspects of self-control with confidence, in the affective domain.
- 6) *Trsna doksaya*: not attached to good or bad deeds. This verse is related to the psychomotor domain in Bloom's taxonomy. Concerning learning, this verse expresses the aspect of creativity in creating something that can be tested openly.

Concerning the description of the three spiritual behaviors mentioned above, it can be seen that part of the *Tri Pramana* characteristics has similarities with the new version of Bloom's taxonomy. Anderson and Krathwohl have made improvements to Bloom's taxonomy called the new version of Bloom's taxonomy (Abuhassna et al., 2020). The new version of Bloom's Taxonomy is parallel to the transformations that take place in 21st-century education. This means that the actualization of the *Tri Pramana* values can be integrated into a lesson.

## 8. Actualization of *Tri Pramana* Values in Learning

The parts of the *Tri Pramana* consist of *Pratyaksa Pramana*, *Anumana Pramana*, and *Agama Pramana* (*Sabda Pramana*) (Suparya, 2021). If we contemplate deeply, all objects and events that become our knowledge and practice are actually all obtained through the *Tri Pramana*.

### d. *Sabda Pramana* (*Agama Pramana*)

According to Suardeyasa, *Sabda Pramana* (*Agama Pramana*) is a way to get to the truth by believing in religious teachings that come from sacred literature (Suardeyasa, 2018). According to Badra and Seken, *Sabda Pramana* (*Agama Pramana*) is a way to gain knowledge by believing in the notification or the words of the holy people (Seken & Badra, 2019). Utama et al. explained that *Sabda Pramana* (*Agama Pramana*) is a person's way of learning which is done by obtaining information directly from reliable learning sources (Utama et al., 2013). This way of learning optimally uses the potential of the language (voice) used, both orally and in writing.

According to Arjaya and Puspawati, *Sabda Pramana* (*Agama Pramana*) is a way of learning that is done by obtaining information directly from reliable learning sources (Arjaya & Puspawati, 2017). Widiasih said that the *Sabda Pramana* (*Agama Pramana*) is knowledge obtained through testimonies from people whose words are trusted, or from texts that are acknowledged to be true (Widiasih, 2015). As the Hindu religion book for grade IV Elementary School in Bali, it is stated that there are 2 types of testimony (Saputra & Sujaya, 2019):

3) *Laukika Sabda* : testimonies obtained from trusted people and their testimonies can be accepted by common sense. In other words, if it is associated with the learning process, it means that this section is an activity of listening to lectures and discussion activities.

4) *Vaidika Sabda* : testimony based on the sacred Vedic texts. In other words, if it is related to the learning process, it means that this section is an activity to study textbooks, modules, and texts related to learning materials.

Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this part of *Sabda Pramana* (*Agama Pramana*) can be related to C1 (Knowledge) and C2 (Understanding) in the Cognitive domain. This C1 (Knowledge) will be related to *Vaidika Sabda*. In other words, the cognitive domain in the knowledge aspect will be achieved when students read, mark, study, and memorize the learning materials contained in learning texts. Then C2 (Understanding) will be related to *Laukika Sabda*. That is, the cognitive domain in the aspect of understanding will be achieved when students discuss, associate, estimate, compare, and summarize the learning materials proposed by the teacher with all students (Stanny, 2016). In the Affective domain, the *Sabda Pramana* (*Agama Pramana*) section can be associated with A1 (Acceptance) and A2 (Responsive): This A1 (Acceptance) will be related to both *Laukika* and *Vaidika Sabda*. Thus, the affective domain in the acceptance aspect will be achieved when students listen, choose, question, and follow the learning materials, both those contained in the learning texts and those presented by the teacher. Then A2 (Responsive) will be related to *Laukika Sabda*. That is, the affective domain in the responsive aspect will be achieved when students answer, discuss, agree, or reject the learning materials proposed by the teacher (Bertucio, 2017). Furthermore, in the Psychomotor domain, *Sabda Pramana* (*Agama Pramana*) section can be related to P1 (Replication). This P1 (Replication) will relate to both *Laukika* and *Vaidika Sabda*. This means that the psychomotor domain in the replication aspect will be achieved when students imitate, follow, and repeat what is learned from the teacher and texts related to learning materials (Spindler, 2020).

Based on the explanation above, it can be concluded that the learning indicators from the *Sabda Pramana* (*Agama Pramana*) are "references and affirmations". Reference is intended as a reference or reference source for knowledge obtained from studying learning texts. While Affirmations are intended for strengthening knowledge obtained from learning discussions based on what is confirmed by the teacher.

### e. *Pratyaksa Pramāna*

According to Suardeyasa, *Pratyaksa Pramana* is a technique to get to the truth by observing the condition of a fact (Suardeyasa, 2018). According to Badra and Seken, *Pratyaksa Pramana* is a way to gain knowledge by paying attention and seeing directly (Seken & Badra, 2019). According to Arjaya, *Pratyaksa Pramana* is a way of learning that is done by direct observation of the subject matter (Arjaya & Puspawati, 2017).

Utama et al. explained that in *Pratyaksa Pramana*, students' physical condition is highly demanded in learning because students are physically involved directly with the material being studied (Utama et al., 2013). In addition, the strength of prior knowledge affects the freedom to make observations and has implications for the results of observations. Observations of the same object can give different results if done by different people. Widiasih mentions that *Pratyaksa Pramāna* is about direct observation through the five senses with the object being observed, thus giving knowledge about objects, according to their circumstances (Widiasih, 2015). *Pratyaksa Pramāna* consists of 2 levels of observation, which are listed in the Hindu religion book grade IV Elementary School in Bali, namely (Saputra & Sujaya, 2019):

3) *Nirwikalpa Pratyaksa* unspecified observation, is the observation of an object without judgment, without association with a subject.

4) *Savikalpa Pratyaksa* determined or differentiated observations, observations of an object are accompanied by the introduction of characteristics, nature, sizes, types, and also the subject.

Knowledge is said to be true if the description of the stated properties matches the observed object. In addition to observing real objects, the *Pratyaksa Pramāna* also teaches that both non-existent and unreal objects can also be observed. Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this *Pratyaksa Pramana* section can be related to C1 (Knowledge), C2 (Understanding), C3 (Application), C4 (Analysis), and C5 (Synthesis) in the Cognitive domain. The cognitive domain in the C1 (Knowledge) aspect will be achieved when students recall the learning materials contained in learning texts as well as those confirmed by the teacher. This is then associated with studying, identifying, reviewing, and exploring real objects that are used as sources of information in learning. Aspects of C2 (Understanding) will be achieved when students explore information, detail, associate, compare,

and generalize the information obtained on real objects that are used as learning resources. Furthermore, the C3 (Application) aspect will be achieved when students investigate, relate, implement and modify the information contained in learning texts as well as those confirmed by the teacher with real objects that are used as learning resources. Then the C4 (Analysis) aspect will be achieved when students combine the information contained in learning texts as well as those confirmed by the teacher with the results of detection, diagnosis and selection of real objects that are used as learning resources. And the C5 (Synthesis) aspect will be achieved when students generalize and conclude various information both from real objects that are used as learning resources, learning texts, and learning affirmed by the teacher (Stanny, 2016).

In the Affective domain, the *Pratyaksa Pramāna* section can be related to A2 (Responsive) and A3 (the value adopted). The A2 (Responsive) aspect will be achieved when students interpret and practice the information contained in learning texts as well as those confirmed by the teacher on real objects that are used as learning resources. Then the A3 aspect (the value adopted) will be achieved when students justify, clarify and complete the information contained in the learning texts as well as those confirmed by the teacher with information obtained from real objects that are used as learning resources (Bertucio, 2017).

Furthermore, in the Psychomotor domain, the *Pratyaksa Pramana* section can be associated with P1 (Replication), P2 (Manipulation), P3 (Determination), and P4 (Articulation). This P1 (imitation) aspect will be achieved when students position, combine and replicate the information contained in learning texts as well as those confirmed by the teacher with information obtained from real objects that are used as learning resources. Then the P2 (Manipulation) aspect will be achieved when students identify, manipulate and demonstrate various information obtained from real objects that are used as learning resources. Furthermore, the P3 aspect (determination) will be achieved when students refine and calibrate the information contained in learning texts as well as those confirmed by the teacher with information based on controlling real objects that are used as learning resources. And the P4 (articulation) aspect will be achieved when students integrate, combine, and modify various information obtained from real objects that are used as learning resources (Spindler, 2020). Based on the explanation above, *Pratyaksa Pramana* can be said to have the same position as the scientific approach. So that the decrease in learning indicators from *Pratyaksa Pramana* is observation, asking questions, gathering information, processing information, and communication.

#### f. *Anumana Pramāna*

According to Suardeyasa, *Anumana Pramana* is a way to get to the truth by making comparisons, drawing conclusions from causal relationships, and comparing one object to another based on generally accepted laws in the universe (Suardeyasa, 2018). According to Badra and Seken, *Anumana Pramana* is a way to gain knowledge by drawing conclusions from the analysis process or analyzing to get a conclusion (Seken & Badra, 2019). According to Arjaya, *Anumana Pramana* is a way of learning that is done by reasoning on material that cannot be reached directly (Arjaya & Puspawati, 2017).

Utama et al explained that *Anumana Pramana* is a person's way of learning which is done by way of reasoning on subject matter that cannot be reached directly (Utama et al., 2013). Reasoning on the subject matter is done based on previous knowledge and experience, namely by drawing conclusions based on previous knowledge and experience. Widiasih said that *Anumana Pramana* is a way of gaining knowledge based on logical conclusions (Widiasih, 2015). Where the conclusion is the result obtained by the existence of an intermediary between the subject and object. As for the Hindu religion book for grade IV Elementary School in Bali, it states that the conclusion process to *Anumana Pramana* goes through several stages, namely as follows (Saputra & Sujaya, 2019):

- 6) *Pratijñā*, is the first process: introducing the object of the problem to the truth of observation;
- 7) *Hetu*, is the second process: the reason for the conclusion;
- 8) *Udaharana*, is the third process: linking the general rule to a problem;
- 9) *Upanaya*, is the fourth process: the use of general rules in the reality seen;
- 10) *Nigamana*, is the fifth process: in the form of a true and definite conclusion from the entire previous process.

## 9. Discussion

Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this part of *Anumana Pramana* can be related to the Cognitive Domain in the C6 (Evaluation) aspect, namely *Pratijñā*, *Hetu*, *Daharana*, and *Upanaya*, then the C5 (Synthesis) aspect, namely *Nigamana*. The cognitive domain in the C6 (Evaluation) aspect will be achieved when students coordinate, prove and validate various information obtained from the projection of real objects that are used as sources of information in learning. Then the C5 (Synthesis) aspect here is not only to conclude but also to the process of creating. So that the C5 (Synthesis) aspect will be achieved when students produce, create and construct new information based on the formulation of various information from real objects that are used as sources of information in learning (Stanny, 2016). In the Affective domain, the *Anumana Pramāna* section can be related to A4 (Characteristics). Aspect A4 (Characteristics) will be achieved when students revise, modify, and practice various information from real objects that are used as learning resources (Bertucio, 2017). Furthermore, in the Psychomotor domain, the *Anumana Pramana* section can be associated with P4 (Articulation) and P5 (Naturalist). Aspects of P4 (Articulation) will be achieved when students sharpen and adapt information from real objects that are used as learning resources. Then the P5 (Naturalist) aspect will be achieved when students specify, manage and design new information based on real objects that are used as learning resources (Spindler, 2020). Based on the explanation above, it can be concluded that the learning indicators from *Anumana Pramana* are "summarizing, responding, linking, formulating, and colligating". Concerning the actualization of *Tri Pramana* values in learning, a mapping of the *Tri Pramana* parts with Bloom's Taxonomy can be formed. The following mapping can be seen in Table 1.

Table 1. Mapping of *Tri Pramana* with Bloom's Taxonomy

Bloom's Taxonomy	Cognitive	Affective	Psychomotor
<i>Tri Pramana</i>			
<i>Sabda Pramana</i>	(C1) Knowledge (C2) Understanding	(A1) Acceptance (A2) Responsive	(P1) Replication
<i>Pratyaksa Pramana</i>	(C1) Knowledge (C2) Understanding (C3) Application (C4) Analysis (C5) Synthesis	(A2) Responsive (A3) The value adopted	(P1) Replication (P2) Manipulation (P3) Determination (P4) Articulation
<i>Anumana Pramana</i>	(C6) Evaluation (C5) Synthesis (Creating)	(A4) Characteristics	(P4) Articulation (P5) Naturalist

**b. Tri Pramana Concept-based Learning Scenario**

*Tri Pramana* has an understanding of a technical approach or method or approach used to gain knowledge. Where this *Tri Pramana* can be mapped with Bloom's taxonomy and bring up some indicators from the parts of this *Tri Pramana*. In this regard, it is possible to outline a learning scenario based on the *Tri Pramana* concept. These scenarios can be seen in Table 2, Table 3, and Table 4.

Table 2. Learning Scenarios of the *Sabda Pramana (Agama Pramana)* stage

Indicator	Teacher Activities	Student Activities
Reference	Distributes learning texts.	Responding to the material learned from learning texts.
Affirmation	Explaining learning materials that are integrated into real objects as the basis of information source on learning.	Listening and verifying learning materials that will be applied when identifying real objects that are used as sources of information.

Table 3 Learning Scenarios of the *Pratyaksa Pramana* stage

Indicator	Teacher Activities	Student Activities
Observation	In identifying real objects that are used as sources of information, collaborative learning is carried out. In this case, the teacher accompanies students in observing real objects that are used as sources of information to understand the learning materials contained therein.	Students observe real objects that are used as sources of information to understand the learning materials contained therein.
Asking Questions	The teacher asks or gives feedback to students.	Students ask questions to get clarity on the learning material contained in real objects that are used as sources of information. "Question" is not always in the form of a "question sentence," but can also be in the form of a statement, as long as both want a verbal response.
Gathering Information	The teacher accompanies students and provides stimulation to students so that students do the reasoning process.	Students do reasoning on the learning materials contained in real objects that are used as sources of information.
Processing Information	The teacher accompanies students and provides stimulation to students so that students do information processing.	Students process information about learning materials obtained from real objects that are used as sources of information.
Communicating	The teacher accompanies students in making presentations on information about learning materials that they get from real objects that are used as information sources.	Students make presentations on information about learning materials that they get from real objects that are used as sources of information.

Table 4 Learning Scenarios of the *Anumana Pramana* stage

Indicator	Teacher Activities	Student Activities
Summarizing	Teachers accompany and motivate students.	Students introduce the object of the problem to the truth of the observation.
Responding	Teachers accompany and motivate students.	Students state the reasons for the conclusion.
Linking	Teachers accompany and motivate students.	Students relate general rules to real objects that are used as sources of information with a learning problem.
Formulating	Teachers accompany and motivate students.	Students use general rules in the reality they see.
Colligate	Teachers accompany and motivate students.	Students make correct and definite conclusions from the entire previous process. This conclusion will be in the form of a case made by each student and equipped with a form of problem-solving (to be used as a question bank development).

**10. Conclusion**

Concerning learning pedagogy, the position of the *Tri Pramana* concept has similarities with the new version of Bloom's

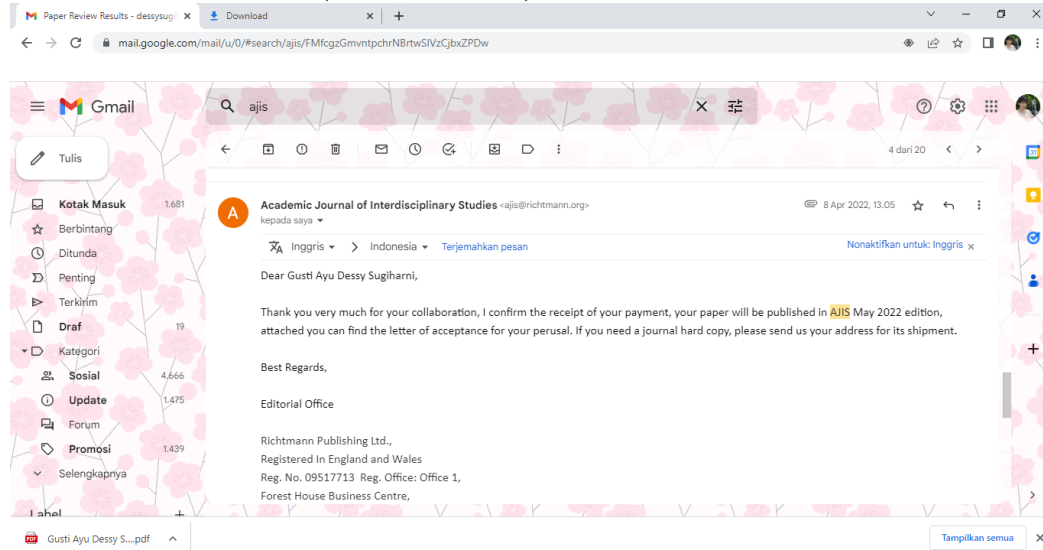
taxonomy. So the *Tri Pramana* can be interpreted as an approach in learning which consists of three parts (*Sabda Pramana* (*Agama Pramana*), *Pratyaksa Pramana*, and *Anumana Pramana*). *Sabda Pramana* (*Agama Pramana*) is the initial stage or the stage for beginners who are just learning, namely the theoretical stage, where a person learns preliminary knowledge with outward learning techniques. This outward learning technique is to study the existing material, both from books and teacher lectures by utilizing their intellectual intelligence. *Sabda Pramana* (*Agama Pramana*) can be reduced to several indicators in finding justification for learning. This indicator will be able to prepare students before heading to the stages of activities in the scientific approach. The indicators in the *Sabda Pramana* (*Agama Pramana*) are "references and affirmations". *Pratyaksa Pramana* is the stage of knowing, experiencing, and attaining knowledge through sensory awareness by experiencing the cosmic connectedness of the knowledge learned directly. *Pratyaksa Pramana* can be reduced to several indicators in finding justification for learning. This indicator covers all stages of activities in the scientific approach. The indicators for *Pratyaksa Pramana* are "observation, asking questions, gathering information, processing information, and communicating". *Anumana Pramana* is the stage of concluding the knowledge gained by self-learning techniques, namely learning techniques by utilizing deep wisdom that requires clarity of mind, the sensitivity of feelings, and the sharpness of intuition. Based on the meaning explanation of *Anumana Pramana*, it can be reduced to several indicators in finding justification for learning. These indicators will be able to complete the stages of activities in the scientific approach. The indicators in *Anumana Pramana* are summarizing, responding, linking, formulating, and colligating. The ultimate goal of applying *Tri Pramana* values in learning does not stop only until students can solve problems. The ultimate goal of applying *Tri Pramana* values in mathematics learning is when students can make or create a new case in their learning and find solutions to the problem. Cases and problem-solving found by students can be used to enrich the question bank of a lesson. Based on the decrease in indicators related to learning activities from each part of *Tri Pramana*, the *Tri Pramana* concept can be used as an alternative to complete the scientific approach to learning that is applied to the current learning curriculum in Indonesia.

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Research Article

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## Tri Pramana Values in Educational Pedagogy

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### Abstract

This paper aimed to discuss systematically the study of Tri Pramana values in learning. This paper was divided into three parts, namely: 1) Tri Pramana's position in education; 2) Actualization of Tri Pramana Values in Learning, and 3) This paper was closed by presenting a conclusion which was the answer to the problems raised from this paper. The writing method used literature study and comparative analysis. The results of the analysis showed that the position of the Tri Pramana learning concept is similar to the new version of Bloom's taxonomy. So that Tri Pramana can be interpreted as an approach to learning that consists of three parts (Sabda Pramana, Pratyaksha Pramana, and Anumana Pramana). The learning indicators found in Sabda Pramana (Agama Pramana) were "references and affirmations"; in Pratyaksha Pramana were "observation, asking questions, gathering information, processing information, and communicating"; and in Anumana Pramana were "summarizing, responding, linking, formulating, colligate". The Tri Pramana concept can be used as an improved alternative to the scientific approach applied to the current learning curriculum in Indonesia.

**Keywords:** Tri Pramana - Values - Educational - Pedagogy

### 1. Introduction

The current learning process emphasizes effectiveness (Gonida et al., 2019). The authentic cooperative learning process is a strategy that is often used in contemporary learning. This strategy also helps strengthen collective learning which is very important to create critical power and

awareness for students in preparing themselves to face the changes and challenges of the times (An & Mindrila, 2020). Changes in the environment and the market economy approach have implications for the growing demands for teacher professionalism (Junior et al., 2020). Teachers must be able to become learners throughout their careers to increase the effectiveness of the learning process in line with developments and environmental changes (Line, Curtis J., 2018). Teachers must teach based on professional standards to ensure the learning quality and have direct communication and also use technology effectively with students to support the development and improvement of educational quality (Ariawan et al., 2018; Okoye et al., 2020; Sugiharni et al., 2018).

School is one of the places to support educational quality development and improvement (Tang et al., 2020; To et al., 2020). Almost every day the students come and enter school to study and increase knowledge. However, most people are still confused by the difference between science and knowledge (Lidar et al., 2020). Indeed, science is knowledge, while knowledge is information obtained and everything that is known to humans (Minter, 2019). Science itself is knowledge in the form of information that is explored by humans (Matshediso, 2020). So that humans can master that knowledge which becomes a science (Sekar, 2016). In essence, knowledge is based on the thought process where humans are thinking creatures (Snake-Beings, 2017). Thinking is an activity to find something that is considered true that can be used as knowledge (Can & Can, 2020). By knowing the truth we will find the knowledge that can be accounted for openly to be debated and tested to achieve more definite knowledge (Small, 2020).

Hinduism has a very solid basic framework of truth because it makes sense and is conceptual. The concept of seeking the ultimate truth in Hinduism is described in philosophical teaching called *Tattwa* (Chander, 2013; Long, 2018; Shama Rao & Kamath Burde, 2017). *Tattwa* in Hinduism can be fully absorbed by the human mind through several ways and approaches called *Pramana* (Mumford, 1997). There are three main ways of absorption which are called *Tri Pramana* in the teachings of Hinduism (Marutama et al., 2018). *Tri Pramana* causes human reason and understanding to accept the ultimate truth in *Tattwa* so that it develops into belief and trust (Yoda, 2017). This belief and trust will form the new knowledge (Wolfe & Griffin, 2018).

The formation of new knowledge in the learning process will require an approach to find justification for that knowledge (Aigul et al., 2021). One of the success factors of learning is determined by the approach and method used by a teacher (Göktepe Yildiz & Göktepe Körpeoglu, 2019). Many approaches and learning methods can be used (Lovings et al., 2020). In this regard, teachers must be careful in choosing which approaches and methods are suitable for their environment (Marlatt, 2018). The learning approach is an idea or principle of how to view determining learning activities (Björklund et al., 2021). We can find this idea or principle in the values of *Tri Pramana* which is a series of activities that can be used as an approach to learning.

Concerning the above, it will be seen how the approach description to proving the truth of knowledge regarding the *Tri Pramana* values will be seen. That is whether it can complement the existing approach and it is a continuation of the previous approach, or is it an equation of the existing approach. Concerning various basic questions, as stated above, this paper systematically discusses the study of *Tri Pramana* values in learning. Thus this paper is divided into three parts. First is the position of *Tri Pramana* in education; the second is the actualization of the *Tri Pramana* values in learning. Then third, this paper is closed by presenting a conclusion which is the answer to the problems raised in this paper.

## 2. *Tri Pramana's* Position in Education

*Tri Pramana* is one of the teachings in the Hindu *Tattwa*. Hindus do proof of a justification for knowledge by applying the teachings of *Tri Pramana* (Seken & Badra, 2019). Etymologically *Tri Pramana* comes from the words "*Tri*" and "*Pramana*". *Tri* means three and *Pramana* mean way. So "*Tri Pramana*" is three ways to know the truth in this case God Almighty (*Ida Sang Hyang Widhi*). By knowing about the existence of *Ida Sang Hyang Widhi*, then *Sraddha* or one's belief is getting



stronger. Widiasih said the concept of *Tri Pramana* means three ways for Hindus to believe in the existence of *Ida Sang Hyang Widhi Wasa* (Widiasih, 2015). In *Widhi Tatwa* it is also mentioned that *Tri Pramana* is an effort to find out the nature of the truth of something, both real and abstract. According to Seken and Badra, *Tri Pramana* is three ways to find out the nature of the truth of something, both real and abstract. This *Tri Pramana* causes human reason and understanding to accept the ultimate truth in *Tattwa* so that it develops into belief and trust. (Seken & Badra, 2019). According to Arjaya and Puspawati, *Tri Pramana* is 3 (three) ways of the main absorption. *Tri Pramana*, "Tri" means three, and "Pramana" means way or measure (Arjaya & Puspawati, 2017). According to Suardevyasa, *Tri Pramana* means three ways to get to the truth. So *Tri Pramana* is three ways to know the nature of the truth of something. The parts of *Tri Pramana* will support each other in a learning context (Suardevyasa, 2018). Based on some of the opinions above, it can be concluded in general that *Tri Pramana* is three learning techniques to build a belief in new knowledge of the existing truth.

*Wrhaspati Tattwa* sloka 26 mentions:

"Pratyaksanumanasca krtan tad wacanagamah pramananitriwidamproktam tat samyajnanam uttamam. I kang sang kahanan dening pramana telu, ngaranya, pratyaksanumanagama".

Meaning:

As for the person who is said to have three ways to gain knowledge, which is called *Pratyaksa*, *Anumana*, dan *Agama* (*Sabda*).

Concerning the nature of education, *Tri Pramana* can be used as an approach to achieve the three elements contained in education, namely educating, teaching, and training. (Ariestini et al., 2013; Redlo et al., 2020). Educating is an activity that is more aimed at developing character, conscience, enthusiasm, love, a sense of decency, piety, and others. (Reis & Formosinho, 2020). Teaching means giving lessons about sharing knowledge that is beneficial for the development of thinking skills (Maxwell, 2019). Training is an attempt to acquire skills by practicing something repeatedly so that there is a mechanism or habituation (Kazu & Is, 2018).

*Wrhaspati Tattwa* sloka 26 mentions:

"Pratyaksa ngaranya katon kagamel. Anumana ngaranya kadyangganing anon kukus ring kadohan, yata manganuhingganing apuy, yeka Anumana ngaranya".

Meaning:

*Pratyaksa* his name (because) looks (and) held. *Anumana* is called seeing smoke in a distant place, to prove the certainty (of the existence of) fire, that is called *Anumana*.

The *Tri Pramana* relationship with the theory of education is that education is an activity that can only be done by humans (Jefferson et al., 2017). Education as human activity can be observed as a practice in life (van As, 2019). Educational theory and practice are two things that cannot be separated, have a complementary relationship (complimentary), and complement each other (Tabensky, 2021). J.H. Gunning (Netherlands) once stated that "Theory without practice is a very special act (genius), whereas practice without theory is for a madman or criminal". According to Gunning, most educators need an intimate blend of the two (theory and practice) (Gunning, 2011).

*Wrhaspati Tattwa* sloka 26 mentions:

"Agama ngaranya ikang aji inupapattyan desang guru, yeka Agama ngaranya. Sang kinahanan dening pramana telu Pratyaksanumanagama, yata sinagguh Samyajnana ngaranya".

Meaning:

*Agama* (*Sabda*) is called knowledge given by teachers (scholars), that is said *Agama* (*Sabda*). The person, who has three ways to gain knowledge of *Pratyaksa*, *Anumana*, and *Agama* (*Sabda*), is called *Samyajnana* (all-knowing).

Thus *Tri Pramana* is related to the responsibility of education. Humans will not become humans if they do not live together with and in society (Thwaites, 2021). Individuals and society cannot be separated from each other, and need each other (Symeou & Karagiorgi, 2018). Education functions to improve the quality of human life, both as individuals and as groups in social life (Kern, 2020). The family environment plays an important role in the development of his personality as a unit of mental life (Alam, 2018). In other words, the family is responsible for guiding the lives of individuals which is the basic capital for further development. So that humans as individuals can achieve the level and quality of life that a person might achieve in life.

Learning is the main activity in the educational process (Hansen et al., 2020). In Skinner's view, learning is the opportunity for an event to occur that triggers a learning response, either as a consequence as a reward or a reprimand, or punishment (Johnson et al., 2017). Thus, the selection of a descriptive stimulus and the use of reinforcement can stimulate individuals to be more active in learning, so that learning is a relationship between stimulus and response. This is similar to Wrhaspati Tattwa sloka 16 which states:

*"Ikang citta hetu nikang atman pamukti swarga, citta hetu ning atma tibeng naraka, citta hetu pamukti swarga, citta hetu ning atma tibeng naraka, citta hetu nimittanyan pangdadi tiryak, citta hetunyan pangjanma manusa citta hetunya n pamanggihakan kamokasan mwanng kalepasan, imittanya nihan"*.

Meaning:

Tranquility, heaven and hell, animal existence, and human form, all these are produced by the power of the mind. The mind (*Citta*) causes the *atma* to enjoy *moksha*. It is the mind that causes the *atman* to go to hell. Thought that cause to be born as an animal. Thought that cause to be born as a human. Thought that leads to attaining *moksha* and liberation.

From the description of the verse above, it is stated that the mind is the basic element that influences actions and leads individuals to happiness and misery. In other words, the relationship between stimulus and response will be formed according to the approach (*Pramana*) applied by a teacher. The weakness of Skinner's learning theory is that the response will be difficult to apply to complex behavior as a measure of the occurrence probability (Axe et al., 2019). This can be minimized in this Tattwa teaching. In Wrhaspati Tattwa sloka 16 it means that a teacher must be able to direct the mind power of students with learning rules as the law of cause and effect. So the response can be applied in various situations.

Gagne views that learning is influenced by internal factors and external factors interacting with each other. So that external conditions and internal conditions in the form of a state of individual cognitive processes will interact with each other in obtaining learning outcomes. These are categorized as motor skills, verbal information, intellectual abilities, cognitive strategies, and attitudes (Çetin & Solmaz, 2020). In this case, a weakness of this theory will emerge, namely that students cannot find their learning style because, in this theory, the learning is only oriented to the observed and measured results (Fang & Gagne, 2018). This weakness can be answered by Wrhaspati Tattwa sloka 21:

*"Yapwan pada gong nikang sattwa lawan rajah, yeka matangnyan mahyun mugawaya dhama denya, kedadi pwakang dharma denyu kalih, ya ta matangnyun mudih ring swarga, apan ikang sattwa mahyun ing gawe hayu, ikang rajah manglakwaken"*

Meaning:

If the *sattwam* and *rajah* are the same sizes, it causes them to want to practice dharma by them, both of them succeed in dharma, which causes them to return to heaven because the *sattwam* wants to do good, the *rajah* does it.

The verse above states that individual happiness will be achieved if there is a balance between *sattwam* (intelligence) and *rajah* (discipline). Thus, this means that an approach (*pramana*) will be

needed to strike a balance between intelligence and discipline. So that this will affect changes in individual behavior and then the weaknesses of Gagne's learning theory will be avoided.

Piaget views learning as a process of assimilation and accommodation of the association results with the environment and inappropriate observations between new information obtained with previously known information. Piaget explained about three ways for children to arrive at ways of knowing things, namely through social interaction, physical knowledge, and mathematical logic (Hanfstingl et al., 2019). The same thing is also mentioned in *Wrhaspati Tattwa* sloka 16 and 26. The contents of this verse complement the weakness of Piaget's theory which is not able to explain the structure, process, and cognitive function clearly. (Babakr et al., 2019). This verse implies that *Tri Pramana* is a medium that can be used to form cognitive structures, processes, and functions by using the power of the mind.

According to Rogers' view, learning rests on the principle of freedom and individual differences in education. Thus, students will know themselves better, accept themselves as they are, and finally feel free to choose and act according to their individuality with full responsibility (Sutton & DeSantis, 2017). The same thing is also contained in *Wrhaspati Tattwa* sloka 56:

"Nīrdvandvan nirvikaraṅca nisafitamacalam tathi, Yadrūpath dhyayate nityāṅi, tad dhyānamigi kathyate. Ikang jñāna tan pangrwarwa, tatan wikāra, enak hēneng-heneng nira, umidēng sada tan kāwaranan, yeka dhyāna yoga ngaranya".

Meaning:

The mind is concentrated, not changing, calm and serene, still not shaken, not enveloped in anything, that's the name of *dhyana yoga*.

From the above verse, it is stated that concentration of mind and not being affected by any influence is one of the paths to happiness. In other words, believing in one's abilities can be a way to achieve a goal. Concerning learning, an approach (*pramana*) is needed to be able to arouse students' self-confidence. *Tri Pramana* is an approach that is recommended in *Tattwa* to arouse students' confidence in knowledge. The existence of activities to prove the truth of knowledge in the *Tri Pramana* theory can be used as a basis for answering the weaknesses of Rogers' theory. Where the weakness of Rogers' theory is that it is individual, the learning process will not succeed if there is no motivation and a supportive environment. It is difficult to apply it in a more practical context. (Awang et al., 2020). This weakness is answered by the *Tri Pramana* concept in *Wrhaspati Tattwa* sloka 26. This verse means that by taking steps to prove the truth of knowledge through the *Tri Pramana* concept, confidence in that knowledge will be openly accounted for.

Bruner's view of learning can be described as a categorization approach. All individual interactions with nature will always involve the categories needed for the functioning of humans. Categorization simplifies complexity in individual environments (Rutten & Soetaert, 2013). The weakness of this learning theory is that this learning theory requires students to have mental readiness and maturity. Students must be brave and willing to know their surroundings (Schapira et al., 2021). This weakness can be minimized with help or instructions in the form of information from the teacher. This information can be contained in modules or textbooks that have been prepared before starting the lesson. The same thing is contained in *Wrhaspati Tattwa* sloka 26. With the existence of *Agama (sabda) pramana*, teachers and teaching texts will provide affirmations and references to initial knowledge and information as a basis for learning for students.

Learning in Bloom's view is a change in the quality of cognitive, affective, and psychomotor abilities to improve the lives of students both as individuals and members of society as well as God's creatures. (Bertucio, 2017). In this regard, in *Wrhaspati tattwa* sloka 52 it is stated that there are three spiritual behaviors that humans must always strive for to achieve happiness, namely:

- 1) Jnanabhyudireka: have perfect wisdom or knowledge of nature. This has meaning in the cognitive domain if it is associated with Bloom's taxonomy. If the cognitive domain proposed by Bloom is up to the evaluation aspect, then this *Tattwa* teaching suggests a

perfect cognitive realm. Thus, the characteristics of the Tri Pramana in this Tattwa teaching require the perfection of the evaluation aspect by producing something new related to the things that have been evaluated in the cognitive realm.

- 2) Indria yoga marga: trying not to be enchanted by worldly pleasures by controlling the senses through the path of yoga. This verse contains the affective domain linkage in Bloom's taxonomy. The advantage of this Tattwa teaching in the Tri Pramana characteristics is that there is a balance between aspects of self-control with confidence, in the affective domain.
- 3) Trsna doksaya: not attached to good or bad deeds. This verse is related to the psychomotor domain in Bloom's taxonomy. Concerning learning, this verse expresses the aspect of creativity in creating something that can be tested openly.

Concerning the description of the three spiritual behaviors mentioned above, it can be seen that part of the *Tri Pramana* characteristics has similarities with the new version of Bloom's taxonomy. Anderson and Krathwohl have made improvements to Bloom's taxonomy called the new version of Bloom's taxonomy (Abuhassna et al., 2020). The new version of Bloom's Taxonomy is parallel to the transformations that take place in 21st-century education. This means that the actualization of the *Tri Pramana* values can be integrated into a lesson.

### 3. Actualization of Tri Pramana Values in Learning

The parts of the Tri Pramana consist of Praktyaksa Pramana, Anumana Pramana, and Agama Pramana (Sabda Pramana) (Suparya, 2021). If we contemplate deeply, all objects and events that become our knowledge and practice are actually all obtained through the *Tri Pramana*.

#### 3.1 Sabda Pramana (Agama Pramana)

According to Suardeyasa, *Sabda Pramana (Agama Pramana)* is a way to get to the truth by believing in religious teachings that come from sacred literature (Suardeyasa, 2018). According to Badra and Seken, *Sabda Pramana (Agama Pramana)* is a way to gain knowledge by believing in the notification or the words of the holy people (Seken & Badra, 2019). Utama et al. explained that *Sabda Pramana (Agama Pramana)* is a person's way of learning which is done by obtaining information directly from reliable learning sources (Utama et al., 2013). This way of learning optimally uses the potential of the language (voice) used, both orally and in writing.

According to Arjaya and Puspawati, *Sabda Pramana (Agama Pramana)* is a way of learning that is done by obtaining information directly from reliable learning sources (Arjaya & Puspawati, 2017). Widiasih said that the *Sabda Pramana (Agama Pramana)* is knowledge obtained through testimonies from people whose words are trusted, or from texts that are acknowledged to be true (Widiasih, 2015). As the Hindu religion book for grade IV Elementary School in Bali, it is stated that there are 2 types of testimony (Saputra & Sujaya, 2019):

- 1) Laukika Sabda : testimonies obtained from trusted people and their testimonies can be accepted by common sense. In other words, if it is associated with the learning process, it means that this section is an activity of listening to lectures and discussion activities.
- 2) Vaidika Sabda : testimony based on the sacred Vedic texts. In other words, if it is related to the learning process, it means that this section is an activity to study textbooks, modules, and texts related to learning materials.

Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this part of *Sabda Pramana (Agama Pramana)* can be related to C1 (Knowledge) and C2 (Understanding) in the Cognitive domain. This C1 (Knowledge) will be related to *Vaidika Sabda*. In other words, the cognitive domain in the knowledge aspect will be achieved when students read, mark, study, and memorize the learning materials contained in learning texts. Then C2 (Understanding) will be related to *Laukika Sabda*. That is, the cognitive domain in the aspect of understanding will be achieved when students discuss, associate, estimate, compare, and summarize the learning materials proposed by the teacher

with all students (Stanny, 2016). In the Affective domain, the *Sabda Pramana (Agama Pramana)* section can be associated with A1 (Acceptance) and A2 (Responsive): This A1 (Acceptance) will be related to both *Laukika* and *Vaidika Sabda*. Thus, the affective domain in the acceptance aspect will be achieved when students listen, choose, question, and follow the learning materials, both those contained in the learning texts and those presented by the teacher. Then A2 (Responsive) will be related to *Laukika Sabda*. That is, the affective domain in the responsive aspect will be achieved when students answer, discuss, agree, or reject the learning materials proposed by the teacher (Bertucio, 2017). Furthermore, in the Psychomotor domain, *Sabda Pramana (Agama Pramana)* section can be related to P1 (Replication). This P1 (Replication) will relate to both *Laukika* and *Vaidika Sabda*. This means that the psychomotor domain in the replication aspect will be achieved when students imitate, follow, and repeat what is learned from the teacher and texts related to learning materials (Spindler, 2020).

Based on the explanation above, it can be concluded that the learning indicators from the *Sabda Pramana (Agama Pramana)* are "references and affirmations". Reference is intended as a reference or reference source for knowledge obtained from studying learning texts. While Affirmations are intended for strengthening knowledge obtained from learning discussions based on what is confirmed by the teacher.

### 3.2 *Pratyaksa Pramāna*

According to Suardeyasa, *Pratyaksa Pramana* is a technique to get to the truth by observing the condition of a fact (Suardeyasa, 2018). According to Badra and Seken, *Pratyaksa Pramana* is a way to gain knowledge by paying attention and seeing directly (Seken & Badra, 2019). According to Arjaya, *Pratyaksa Pramana* is a way of learning that is done by direct observation of the subject matter (Arjaya & Puspawati, 2017).

Utama et al. explained that in *Pratyaksa Pramana*, students' physical condition is highly demanded in learning because students are physically involved directly with the material being studied (Utama et al., 2013). In addition, the strength of prior knowledge affects the freedom to make observations and has implications for the results of observations. Observations of the same object can give different results if done by different people. Widiasih mentions that *Pratyaksa Pramāna* is about direct observation through the five senses with the object being observed, thus giving knowledge about objects, according to their circumstances (Widiasih, 2015). *Pratyaksa Pramāna* consists of 2 levels of observation, which are listed in the Hindu religion book grade IV Elementary School in Bali, namely (Saputra & Sujaya, 2019):

- 1) Nirwikalpa *Pratyaksa* unspecified observation, is the observation of an object without judgment, without association with a subject.
- 2) Savikalpa *Pratyaksa* determined or differentiated observations, observations of an object are accompanied by the introduction of characteristics, nature, sizes, types, and also the subject.

Knowledge is said to be true if the description of the stated properties matches the observed object. In addition to observing real objects, the *Pratyaksa Pramāna* also teaches that both non-existent and unreal objects can also be observed. Referring to Bloom's taxonomy which has been revised by Anderson and Krathwohl, this *Pratyaksa Pramana* section can be related to C1 (Knowledge), C2 (Understanding), C3 (Application), C4 (Analysis), and C5 (Synthesis) in the Cognitive domain. The cognitive domain in the C1 (Knowledge) aspect will be achieved when students recall the learning materials contained in learning texts as well as those confirmed by the teacher. This is then associated with studying, identifying, reviewing, and exploring real objects that are used as sources of information in learning. Aspects of C2 (Understanding) will be achieved when students explore information, detail, associate, compare, and generalize the information obtained on real objects that are used as learning resources. Furthermore, the C3 (Application) aspect will be achieved when students investigate, relate, implement and modify the information contained in learning texts as

well as those confirmed by the teacher with real objects that are used as learning resources. Then the C<sub>4</sub> (Analysis) aspect will be achieved when students combine the information contained in learning texts as well as those confirmed by the teacher with the results of detection, diagnosis and selection of real objects that are used as learning resources. And the C<sub>5</sub> (Synthesis) aspect will be achieved when students generalize and conclude various information both from real objects that are used as learning resources, learning texts, and learning affirmed by the teacher (Stanny, 2016).

In the Affective domain, the *Pratyaksa Pramāna* section can be related to A<sub>2</sub> (Responsive) and A<sub>3</sub> (the value adopted). The A<sub>2</sub> (Responsive) aspect will be achieved when students interpret and practice the information contained in learning texts as well as those confirmed by the teacher on real objects that are used as learning resources. Then the A<sub>3</sub> aspect (the value adopted) will be achieved when students justify, clarify and complete the information contained in the learning texts as well as those confirmed by the teacher with information obtained from real objects that are used as learning resources (Bertucio, 2017).

Furthermore, in the Psychomotor domain, the *Pratyaksa Pramana* section can be associated with P<sub>1</sub> (Replication), P<sub>2</sub> (Manipulation), P<sub>3</sub> (Determination), and P<sub>4</sub> (Articulation). This P<sub>1</sub> (imitation) aspect will be achieved when students position, combine and replicate the information contained in learning texts as well as those confirmed by the teacher with information obtained from real objects that are used as learning resources. Then the P<sub>2</sub> (Manipulation) aspect will be achieved when students identify, manipulate and demonstrate various information obtained from real objects that are used as learning resources. Furthermore, the P<sub>3</sub> aspect (determination) will be achieved when students refine and calibrate the information contained in learning texts as well as those confirmed by the teacher with information based on controlling real objects that are used as learning resources. And the P<sub>4</sub> (articulation) aspect will be achieved when students integrate, combine, and modify various information obtained from real objects that are used as learning resources (Spindler, 2020). Based on the explanation above, *Pratyaksa Pramana* can be said to have the same position as the scientific approach. So that the decrease in learning indicators from *Pratyaksa Pramana* is observation, asking questions, gathering information, processing information, and communication.

### 3.3 *Anumana Pramāna*

According to Suardeyasa, *Anumana Pramana* is a way to get to the truth by making comparisons, drawing conclusions from causal relationships, and comparing one object to another based on generally accepted laws in the universe (Suardeyasa, 2018). According to Badra and Seken, *Anumana Pramana* is a way to gain knowledge by drawing conclusions from the analysis process or analyzing to get a conclusion (Seken & Badra, 2019). According to Arjaya, *Anumana Pramana* is a way of learning that is done by reasoning on material that cannot be reached directly (Arjaya & Puspawati, 2017).

Utama et al explained that *Anumana Pramana* is a person's way of learning which is done by way of reasoning on subject matter that cannot be reached directly (Utama et al., 2013). Reasoning on the subject matter is done based on previous knowledge and experience, namely by drawing conclusions based on previous knowledge and experience. Widiasih said that *Anumana Pramana* is a way of gaining knowledge based on logical conclusions (Widiasih, 2015). Where the conclusion is the result obtained by the existence of an intermediary between the subject and object. As for the Hindu religion book for grade IV Elementary School in Bali, it states that the conclusion process to *Anumana Pramana* goes through several stages, namely as follows (Saputra & Sujaya, 2019):

- 1) *Pratijñā*, is the first process: introducing the object of the problem to the truth of observation;
- 2) *Hetu*, is the second process: the reason for the conclusion;
- 3) *Udaharana*, is the third process: linking the general rule to a problem;
- 4) *Upanaya*, is the fourth process: the use of general rules in the reality seen;
- 5) *Nigamana*, is the fifth process: in the form of a true and definite conclusion from the entire previous process.

#### 4. Discussion

Referring to Bloom's taxonomy which has been revised by Andreson and KartWohl, this part of *Anumana Pramana* can be related to the Cognitive Domain in the C6 (Evaluation) aspect, namely *Pratijñā, Hetu, Daharana, and Upanaya*, then the C5 (Synthesis) aspect, namely *Nigamana*. The cognitive domain in the C6 (Evaluation) aspect will be achieved when students coordinate, prove and validate various information obtained from the projection of real objects that are used as sources of information in learning. Then the C5 (Synthesis) aspect here is not only to conclude but also to the process of creating. So that the C5 (Synthesis) aspect will be achieved when students produce, create and construct new information based on the formulation of various information from real objects that are used as sources of information in learning (Stanny, 2016). In the Affective domain, the *Anumana Pramāna* section can be related to A4 (Characteristics). Aspect A4 (Characteristics) will be achieved when students revise, modify, and practice various information from real objects that are used as learning resources (Bertucio, 2017). Furthermore, in the Psychomotor domain, the *Anumana Pramana* section can be associated with P4 (Articulation) and P5 (Naturalist). Aspects of P4 (Articulation) will be achieved when students sharpen and adapt information from real objects that are used as learning resources. Then the P5 (Naturalist) aspect will be achieved when students specify, manage and design new information based on real objects that are used as learning resources (Spindler, 2020). Based on the explanation above, it can be concluded that the learning indicators from *Anumana Pramana* are "summarizing, responding, linking, formulating, and colligating". Concerning the actualization of *Tri Pramana* values in learning, a mapping of the *Tri Pramana* parts with Bloom's Taxonomy can be formed. The following mapping can be seen in Table 1.

**Table 1:** Mapping of *Tri Pramana* with Bloom's Taxonomy

Bloom's Taxonomy <i>Tri Pramana</i>	Cognitive	Affective	Psychomotor
<i>Sabda Pramana</i>	(C1) Knowledge (C2) Understanding	(A1) Acceptance (A2) Responsive	(P1) Replication
<i>Pratyaksa Pramana</i>	(C1) Knowledge (C2) Understanding (C3) Application (C4) Analysis (C5) Synthesis	(A2) Responsive (A3) The value adopted	(P1) Replication (P2) Manipulation (P3) Determination (P4) Articulation
<i>Anumana Pramana</i>	(C6) Evaluation (C5) Synthesis (Creating)	(A4) Characteristics	(P4) Articulation (P5) Naturalist

##### 4.1 *Tri Pramana* Concept-based Learning Scenario

*Tri Pramana* has an understanding of a technical approach or method or approach used to gain knowledge. Where this *Tri Pramana* can be mapped with Bloom's taxonomy and bring up some indicators from the parts of this *Tri Pramana*. In this regard, it is possible to outline a learning scenario based on the *Tri Pramana* concept. These scenarios can be seen in Table 2, Table 3, and Table 4.

**Table 2:** Learning Scenarios of the *Sabda Pramana* (*Agama Pramana*) stage

Indicator	Teacher Activities	Student Activities
Reference	Distributes learning texts.	Responding to the material learned from learning texts.
Affirmation	Explaining learning materials that are integrated into real objects as the basis of information source on learning.	Listening and verifying learning materials that will be applied when identifying real objects that are used as sources of information.

**Table 3:** Learning Scenarios of the *Pratyaksa Pramana* stage

Indicator	Teacher Activities	Student Activities
Observation	In identifying real objects that are used as sources of information, collaborative learning is carried out. In this case, the teacher accompanies students in observing real objects that are used as sources of information to understand the learning materials contained therein.	Students observe real objects that are used as sources of information to understand the learning materials contained therein.
Asking Questions	The teacher asks or gives feedback to students.	Students ask questions to get clarity on the learning material contained in real objects that are used as sources of information. "Question" is not always in the form of a "question sentence," but can also be in the form of a statement, as long as both want a verbal response.
Gathering Information	The teacher accompanies students and provides stimulation to students so that students do the reasoning process.	Students do reasoning on the learning materials contained in real objects that are used as sources of information.
Processing Information	The teacher accompanies students and provides stimulation to students so that students do information processing.	Students process information about learning materials obtained from real objects that are used as sources of information.
Communicating	The teacher accompanies students in making presentations on information about learning materials that they get from real objects that are used as information sources.	Students make presentations on information about learning materials that they get from real objects that are used as sources of information.

**Table 4:** Learning Scenarios of the *Anumana Pramana* stage

Indicator	Teacher Activities	Student Activities
Summarizing	Teachers accompany and motivate students.	Students introduce the object of the problem to the truth of the observation.
Responding	Teachers accompany and motivate students.	Students state the reasons for the conclusion.
Linking	Teachers accompany and motivate students.	Students relate general rules to real objects that are used as sources of information with a learning problem.
Formulating	Teachers accompany and motivate students.	Students use general rules in the reality they see.
Colligate	Teachers accompany and motivate students.	Students make correct and definite conclusions from the entire previous process. This conclusion will be in the form of a case made by each student and equipped with a form of problem-solving (to be used as a question bank development).

## 5. Conclusion

Concerning learning pedagogy, the position of the *Tri Pramana* concept has similarities with the new version of Bloom's taxonomy. So the *Tri Pramana* can be interpreted as an approach in learning which consists of three parts (*Sabda Pramana (Agama Pramana)*, *Pratyaksa Pramana*, and *Anumana Pramana*). *Sabda Pramana (Agama Pramana)* is the initial stage or the stage for beginners who are just learning, namely the theoretical stage, where a person learns preliminary knowledge with



outward learning techniques. This outward learning technique is to study the existing material, both from books and teacher lectures by utilizing their intellectual intelligence. *Sabda Pramana (Agama Pramana)* can be reduced to several indicators in finding justification for learning. This indicator will be able to prepare students before heading to the stages of activities in the scientific approach. The indicators in the *Sabda Pramana (Agama Pramana)* are "references and affirmations". *Pratyaksa Pramana* is the stage of knowing, experiencing, and attaining knowledge through sensory awareness by experiencing the cosmic connectedness of the knowledge learned directly. *Pratyaksa Pramana* can be reduced to several indicators in finding justification for learning. This indicator covers all stages of activities in the scientific approach. The indicators for *Pratyaksa Pramana* are "observation, asking questions, gathering information, processing information, and communicating". *Anumana Pramana* is the stage of concluding the knowledge gained by self-learning techniques, namely learning techniques by utilizing deep wisdom that requires clarity of mind, the sensitivity of feelings, and the sharpness of intuition. Based on the meaning explanation of *Anumana Pramana*, it can be reduced to several indicators in finding justification for learning. These indicators will be able to complete the stages of activities in the scientific approach. The indicators in *Anumana Pramana* are summarizing, responding, linking, formulating, and colligating. The ultimate goal of applying *Tri Pramana* values in learning does not stop only until students can solve problems. The ultimate goal of applying *Tri Pramana* values in mathematics learning is when students can make or create a new case in their learning and find solutions to the problem. Cases and problem-solving found by students can be used to enrich the question bank of a lesson. Based on the decrease in indicators related to learning activities from each part of *Tri Pramana*, the *Tri Pramana* concept can be used as an alternative to complete the scientific approach to learning that is applied to the current learning curriculum in Indonesia.

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