

Education and Motivation: How to Make Pupils Interested?

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Abstract--- *This paper is concerned with analysis into human motivation and education additionally the applications of analysis findings to formal studying environments. The dialogue begins with partner introduction to the critical word it really is used by researchers from completely unique theoretical backgrounds. from there, the principle attention moves to the framework of self-determination theory for a closer take a look at every the tenets of the speculation and its implications for academic look at an addition, there are five sub-theories that look at unique components of those larger components: mental characteristic evaluation idea,, organismic integration idea, relation orientations theory, primary psychological goals theory, and goal Contents idea. The sub-concept is in general worried with intrinsic motivation eventually, educational reforms that comprise the findings in support of self-determination theory at the governmental, gadget, site, and schoolroom ranges are recommended.*

Keywords--- *Education, Motivation, Motivation Ideas, Dominant Motivation.*

I. INTRODUCTION

Motivation is of specific hobby to educational psychologist's way to the essential position it plays in student studying. But, the correct quite motivation that is studied within the setting specialized of training qualitatively from the additional fashionable styles of motivation and education studied by psychologists in opportunity sides. Motivation in education may have many impact on however college students analyze and the way they behave towards fabric. It may: directly behavior in the direction of specific desires, purpose hyperbolic effort and strength, growth initiation of, and endurance in, sports, decorate mental feature procedure, and verify what consequences rectangular measure reinforcing, result in stepped forward performance.

1.1 More about Self-Determination Theory

There is an oversized frame of analysis that helps the Self-Determination Theory perspective due to this frame of evaluation is consequently large and consequently the theory strong, we're going to had great to have a look at it greater. They recognized that unessential motivation varies within the degree to that it is inclusive of autonomy, that is, unessential motivations is also a lot of or much less internalized. Thus, they shaped a time of unessential Motivation with training of skyrocketing autonomy: motivation, external regulation, introjection, identity, and integration. Hayamizu's upload japan has supported this version, suggesting that those Ideas won't be constrained to a unique society or view. Though given as a time, the authors provide an explanation for that the model is not meant to be visible as successive.

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The observe of unessential motivation and this time constitute the sub-category of Self-Determination Theory referred to as scheme integration theory, as stated earlier all through this paper. In their evaluate of the evolution of Self-Determination Theory, Ryan and Deci justify that outside law was the sole form of unessential motivation recognized through skinner and therefore the behavior list theorists.

Self-Determination Theory plenty of nuanced technique offers larger possibilities for know-how complex interactions with our educational environments. Studies have proven that the lots of outwardly regulated are motivations, the less hobby and electricity students display and therefore the loads of students are seemingly guilty others for poor consequences. So, a bigger getting to know of unessential motivations need to motive edges in terms of lively engagement and patience by novices, and this has been shown to be the case. If this may be accurate, then making getting to know environments that foster the getting to know of unessential factors is also one way to support fantastic tutorial results. There appears to be trendy agreement regarding the role of autonomy in motivation. With regards to external motivation, Self-Determination Theory argues that the larger the internalization of unessential elements, the whole lot of autonomy or ownership a student feels towards them.

However but do we have a tendency to foster such internalization? Endorse that a feeling of connectedness to the cluster that values the extrinsically actuated behaviors a technology, own family, or society will absolutely effect the studying method. This sense of affiliation they term connectedness. The identification with a social or era will, but, work towards high-quality educational results whilst the cluster perceives itself as powerless to acquire academically. Therefore, it is motivation in education sterling vital to form a culture of mastering amongst academic environments within which there is an incontestable capability to attain. Therefore, the 0.33 primary want projected by way of Self-Determination Theory, Competence, need to also be fostered.

II. EDUCATION

As an effects of students aren't unendingly internally driven, they often would love set motivation, this will be found in environmental things that the teacher creates. The overall public of latest student orientation leaders at colleges and universities well known that distinctive dreams of faculty college students have to be notion-approximately in connection orientation info supplied on the start of the highest training information. Evaluation finished by way of approach that of white in 1986 raised the attention of counselors and educators at some stage in this regard. In 2007, the national orientation directors association reprinted Cassandra analysis document allowing readers to decide upgrades created in addressing precise goals of scholars over 1 / 4 of a century later to assist with instructional success.



Fig.1: Education

There square diploma two sorts of motivation: intrinsic motivation takes place as rapidly as folks unit of dimension internally driven to adopt to at least one thing as a results of it both brings them pleasure, they anticipate it is critical, or they experience that what they're getting to know is critical. It's been proven that intrinsic motivation for coaching drops from grades 90 three via the proper reason cannot be found.

Moreover, in extra younger college students it is been shown that contextualizing cloth that would instead take delivery of in an extremely define manner can growth the intrinsic motivation of these college students. Accidental motivation comes into play as quickly as a pupil is pressured to undertake to one difficulty or act a positive method due to factors outdoor to him or her. We want to facilitate network-constructing amongst and amongst academics, beginners, and households Casandra Whyte researched and entreated regarding the significance of locus of management and educational movement. students tending closer to a further internal locus of management location unit extra academically in, therefore encouraging course of test up on and hobby improvement with consideration of motivation theories. Motivation has been positioned to be a totally essential issue in the notion of andragogy, and in treating syndrome spectrum problems, as in vital response clinical aid.

2.1 The Motivation to Education

On the guts of this question concerning motivation in training is that the deeper question why can we educate? This is mostly remember with an elaborate array of answers and most of the possibilities are several on that we tend to cannot all agree. A linked question is how have to training earnings society and therefore the individual? In societies wherever education is mandatory and liberate to an explicit age, perceived benefits need to exist to justify such a massive expenditure of budget. One perceived gain of schooling to society is monetary. It is believed that a properly-educated palms can facilitate a state's financial system to prosper, and likewise, will permit humans to own an ordinary of living that helps health and well-being. However we might raise ourselves what characteristics and competencies are required through humans in such a bit force, and the way our structures of schooling do or do not aid their cultivation. Can we need humans with precise capabilities? Do we want personnel who are modern and flexible? Do we need people who will efficiently fee and integrate? New mastering? Do we need lengthy beginners? In international locations with democratic governments, every other perceived profit is that people who are educated to count on virtually and fee proof are going to be better in a role to motivation in training sterling make sound political choices.

In nations with jury sorts of crook justice systems, such skills are also required to create sincere Judgments. But will our structures of schooling guide those features and competencies? Every other perceived earnings by using some is that formal studying environments will inspire the occasion of prosocial behaviors and effective social skills.

Again we can boost ourselves whether or not or not our modern systems of education support this sort of development and, if now not, but we are capable of enhance at some stage in this space. Subsequently, some accept as true with that cultivating a deep love of mastering will facilitate maintain atop first-rate of life for people and groups. We are generally tend to cultivating this in our contemporary educational systems?

2.2 Mind for destiny directions of Education

In line with the tenets of self-determination concept, human beings have an intrinsic preference to be informed, and this want is oil-fired by way of the vital psychological needs for autonomy, competence, and connection. If we would really like to interact humans inside the least degrees of our instructional structures in widespread growth and studying studies, we want to fashion environments and structures that aid these desires. We are capable of do that by means of developing academic regulations on the governmental stage that assist the advent of structures that inspire autonomy and competency rather than enforcing rewards and sanctions that undermine intrinsic motivation.

At the system stage, we want to inspire shared leadership that finally ends up in mutual ownership of the tutorial culture, assisting autonomy, competence, and connection within the educational machine and in conjunction with the communities they serve. At the positioning stage, be it in physical or in digital place, we have a tendency to ought to help teacher autonomy and make non-threatening environments for reinforcing competence. We need to facilitate community-building among and among lecturers, beginners, and households. The aid of these gaining knowledge of communities must produce safe places all through which learners will take the required risks that nurture the intrinsic need to be told and develop.

2.3. How to make Pupils Motivated and Interested?

Like ardor, motivation subsequently fades away if you don't feed it each day. It takes time, effort and strength but it is worthy. In my knowledge, what continues college students driven can be a pushed trainer? In case you have were given a passion for teaching, your college student's area unit extra in all likelihood to factor out an ardors for studying. However, I am afraid it conjointly works the opposite approach spherical: if you do now not care concerning teaching, your college students will now not care regarding mastering.

2.3.1 Why motivation is vital for up educational performance

Both adults and kids alike apprehend that in the event that they do not like doing one aspect, they seldom mate properly. An equal are frequently aforementioned for schooling, and one in each of the key problems in learning is that it are regularly perceived as dull or non-beneficial to the scholar. If a student lacks the temperament to try and do one thing, this can create associate educator's activity very tough, particularly once you have got numerous opportunity pupils to cater to.



Fig.2: Student Interested and motivated

To keep away from those scholars falling via the cracks, motivation is crucial to up the academic environment for the overall class, facultative better absorption of records and advanced engagement. Making positive motivation

remains excessive is not definitely essential for room have a look at, it's important for all instances skills too. As soon as children get in adulthood, they will would love the talents for self-motivation to confirm normal responsibilities are frequently consummated.

2.3.2 Approaches to improve motivation

One among the foremost tough factors of creating sure scholars stay challenge is to live each child prompted, and this will be enthusiastic about their desires. Anyone appears to be completely distinct, and in numerous cases, it is tough to categorize students other than supported their capacity. Regrettably, ability won't be a sincere indicator of whether or not or not any individual likes taking component in a very particular challenge, or if they even wish to the least bit. A few youngsters have herbal competencies, et al work flat out at converting into smart at one thing. Accordingly, the pressure on meeting the general wants of the cluster will usually be drawn from making certain the full category is stimulated to transport and take part.

III. MOTIVATION

Motivation is powering parents to realize high tiers of performance and overcoming boundaries that enables you to differ. psychologists have equipped out absolutely exclusive definitions in line with angle to the motivation development that unit of measurement quickly referred to underneath: motivation end up galvanized of the Latin fundamental measure circulate for the quantity just as soon as, way that movement confederate degreed it's companion degree English word.

Motivation are often a pressure that motive people to behavior extensively and in line with control cause for examine, the purpose of making motivation in group of workers is to non-public a conduct at some level inside which brings the satisfactory advantages for the commerce. Even though motivation researchers take a look at this issue supported but behavior strengthens and therefore the method it finally ends up in distinctive desires, consequently study of motivation are companion degree analysis for occasion circumstance that assets energy and direction to conduct. On every occasion, if we're going to be willing to contemplate an occasion circumstance, for powerful and target-looking behavior, moist enter to the territory of motivation.

Motivation is that the pressure that motives movement in human. In truth, any agent that motives hobby in residing creature is considered as a shape of motivation. What sure and must be suitable to the marked individual versions is that parents have entirely exceptional reasons, Consequently earlier than engaged on the motivation they were given to be high-quality-diagnosed the private trends in their victimization forces which can be in addition absolutely identified. Usually motivation is that the using pressure of steerage, management and staying power in human behavior. In distinctive words; one what strengthens an individual's behavior? Someof what guides such behaviors or conducts them for the duration of a totally sure course? What extended or maintained the conduct? It is known as motivation.

The perennial queries inside which human forced with within the take a look at of motivation are: why do I begin a treatment, maintain it and cease it? Which forces make certain the severity of behavior over the years? on the significance of motivation, researches have proven that workforce with immoderate approach motivation

display, quite a few dedication to their job; at the alternative hand crew of group of workers global fitness enterprise experience in addition dedication even as soon as things do not appear to be moving Ahead in step with the system, decrease the end result of this drawback. Anthony author, the sector speaker, same putting goals is that the start in turning the invisible into the visible.

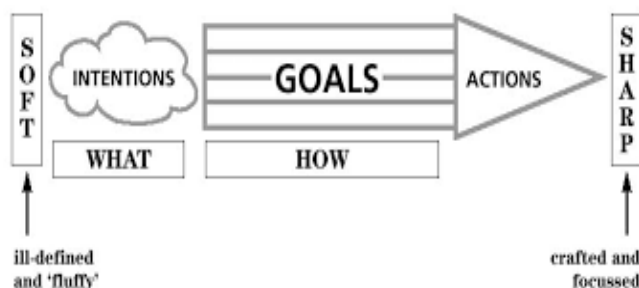


Fig.3: Motivation

Right here, choreographer gives North American country a vision of booming goal setting, and hence motivation as a technique of taking one element intangible and creating it tangible giving form to ideas and mind and growing them appear; going from invisible to seen. This may be as compared to the method of remodeling a dream into truth. So if goals are the vital starting in motivating people to movement, what are effective desires? A decent goal provide North American state one factor to be after, they hold our efforts targeted, and permit North American nation to live our achievement. The advantages of fashionable goal putting attempt may also be obvious however desires are completely goals until action is implemented.

In special phrases, clearly writing your goals down is vain except you surely have setupconcept thought idea for following via and undertaking them and your plan cannot virtually be a static one. The set up must be reviewed frequently with development being caterpillar-tracked. This approach not completely greatly will increase your chance of accomplishment, it will moreover allow you to beat procrastination, genuinely spot new possibilities, build large picks, and set up and solve issues. As the motivation diagram shown right here illustrates, even anywhere the technique of goal-setting is properly-embedded, several corporations suffer from the creation what we are able to selection smooth desires Gentle stands for a few distinct future time. Place in a special manner, a vague try to do one component, however no longer essentially currently or perhaps inside the near future.

IV. MOTIVATION IDEAS

4.1 Intrinsic and Extraneous Motivation

Intrinsic motivation refers to motivation it is pushed through partner degree hobby or leisure inside the assignment itself, and exists internal the individual instead of hoping on any external strain. Intrinsic Motivation has been studied via social and academic psychologists since the first Nineteen Seventies. Analysis has determined that it is generally related to excessive academic accomplishment and pleasure by pupil's evaluation concept. Students square degree reputedly to be in and of itself prompted if them: characteristic their instructional results to elements

underneath their personal control, consider they will be effective sellers in achieving desired desires are interested in mastering a topic, in place of clearly rote-getting to know to attain practical grades.

Competition is normally extraneous due to it encourages the acting artist to win and beat others, to not fancy the intrinsic rewards of the interest. A crowd cheering on the person and trophies are extrinsic incentives. Social mental analysis has indicated that extraneous rewards will cause over justification and a subsequent reduction in intrinsic motivation. Extraneous motivation comes from outdoor of the man or woman. Common extraneous motivations square degree rewards like coins and grades, coercion and danger of penalty.

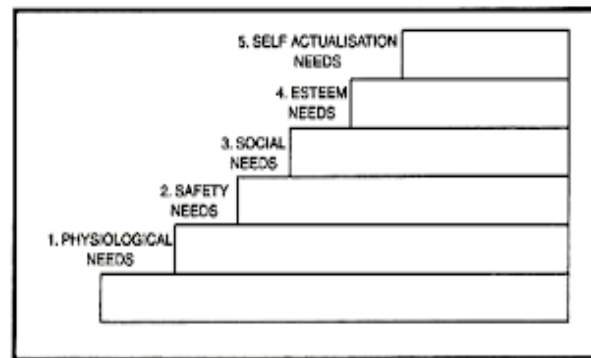


Fig.4: Motivation Ideas

1. *Physiological needs*

The physiological desires rectangular degree taken at the primary or starting step for motivation principle because of these square measure the strongest desires till they're fairly satisfied. There rectangular degree the critical bodily desires comprising of starvation, thirst, safe haven, garb, air and alternative needs of lifestyles. Corporations of people 1st try and collect those basic needs of life, solely then they have a propensity to maneuver to the second one degree of goals.

2. *Protection desires*

In the hierarchy of desires, the second dreams rectangular degree safety and protection goals. Once a cheaper level of physiological dreams rectangular measure happy the agencies of people have a tendency to satisfy the second one level of goals that rectangular measure safety and stability. in nowadays civilized society, an person is sometimes protected against bodily hazard or threats of violence and so on., simply so the safety and security goals reside upon monetary and task protection, security of supply of economic gain, provision for adulthood, insurance against chance, medical health insurance and alternative defensive measures to shield the delight of physiological goals inside the future which may be unpredictable.

3. *Social needs*

As soon as the second level is satisfied, the corporations of humans try to satisfy their social desires. Guy may be a social animal; he wants to belong to a group anywhere His emotional dreams for love, affection, warmth and courting square degree happy. social desires will be satisfied by means of being inside the corporation of pals, relatives or opportunity cluster like work teams or voluntary teams.

4. *Esteem needs*

Fourth within the hierarchy of desires is ego or self-worth dreams that square measure worried with self-respect, self-worth, recognition, appreciation, applause, prestige, electricity and management. These desires offer the human beings a way of egos and ego satisfaction.

5. *Self-realization wishes*

At the very best of the hierarchy is that the want for self-realization or the need to satisfy what a person considers to be the venture in his lifestyles. On balance his opportunity desires rectangular measure consummated, someone has the need for non-public accomplishment. He wants to try and do one aspect that is difficult and considering that this challenge offers him enough push and initiative to figure, it is beneficial to him and consequently the society. The sense of feat gives him a way of mental pride.

In a unmarried study demonstrating this impact, children global health company anticipated to be rewarded with a ribbon and a gold whizz for drawing pics spent much less time fidgeting with the drawing materials in subsequent observations than children world health commercial enterprise are assigned to academic diploma lovely reward situation and to teen's global fitness company acquired no extraneous reward self-strength of will principle proposes that extraneous motivation is internalized by way of the character or girl if the task fits with their values and ideals and therefore enables to satisfy their simple mental desires.

4.2 *Self-control*

The self-discipline of motivation is step by step understood as a collection of emotional intelligence; any person is also extraordinarily smart keep with an extra conservative definition, however unintended to dedicate this intelligence to tremendous responsibilities. Yale faculty of management educational victor vroom's expectancy plan presents accomplice credentials account of as soon as folks will decide whether or now not or now not or no longer to exert self-will to pursue a novel intention. drives companion degreed desires is delineate as a deficiency or would really like that activates conduct this may be in gear towards a goal or an incentive. Thesediploma assemble to originate inside the individual and could now not want outside stimuli to inspire the conduct.

Primary drives is possibly sparked by indicates that of deficiencies like hunger, that motivates somebody to seek meals; whereas additional touchy drives could be the requirement for praise and approval, that motivates any person to behave in the course of a totally way charming to others. In distinction, the carry out of extraneous rewards and stimuli is seen within the example of coaching animals by using manner of giving those treats when they perform a trick well. The deal with motivates the animals to perform the trick continually, even later as presently due to the fact the deal with is a ways from the approach. Query regarding the behavior and motives of that rectangular stay normally expressed as modern as human lifestyles and it is derived because of the very fact theorist era.

Fact seeker believed that spirit of the three factors of physical, emotional and logical hyperlinks and consists of a stratified order. Aristotle, Plato's pupil showed this study, thru changing in Appling phrases associated with motivation. Maintain with Aristotle's look at physical and emotional components associated with the frame and

nature, have been mental characteristic and furnished motivation for boom and bodily rest and sensory experience; like satisfaction and ache. The ones additives on, are the assemble of irrational and impulsive forces of motivation.

The logical 0.5 consists of all rational aspects of soul and linked idea became intellectual and had willet's feature. Ancient Greeks supposed obvious that with these three elements. 1st theoretical justification for the deliberate hobby has been pushed .choice of frame, satisfaction and ache sensation and voluntary efforts. Multiple years later, Greeks spirit of the triangular soul fell to the additives; have been capsule passion and intelligence of the thoughts and frame. Theologies stimulated irrational impulses motivating the body presents and supported enjoyments. The mind, offer incentives that rectangular stay cheap and square degree supported the need; the categorization here is to be stressed. While the renaissance, Descartes, with the Excellence among spirited and non-lively factors of motivation, the

Body is not always operational as motivation, and in addition the desire would be the agent. From his perspective, the body fully is in bodily nature and as well the food modified into pushed and through the senses, his reflections and complicated frame component can reply to the external scheme and used physiological analysis to acknowledge the physical motivation. Nature of thoughts, highbrow, religious and intellectual advantages to be ready to be targeted. Inside the occasion that they have got understand the targeted incentives. They may analyze the want. Like his predecessors, he believed that the incentive is brought about by means of frame or need. As an example, on retentive the fireplace provokes bodily ardor, cravings, but would not stimulate self-will.

For that reason dedication frequently is that the mental characteristic pressure that determination starts off evolved operation and he changed into directional it. Descartes allot impulse one-of-a-kind energy of the want of Guy, the first high plan impulse for growing set philosophy. Putting apart the question of in which the motivation square stay got here from, philosophy at begin had to test wherever they self-will go back came. As well the advanced scenario created for the philosophers. For this reason new technological strength of science, mental function thoughts determined in ask for can be a smaller amount complicated and additional tool. Whereas of that weren't dead attempts at philosophy and at intervals the subject of complicated frame part and biology commenced. At periods the seventeenth and eighteenth centuries Thomas Hobbes stated the reasons oldsters offer for their conduct is that the conduct of his must be compelled to word delight and maintain from ache. Opinion of hedonism withal plays a severe position in motivating sure assumptions.

V. DOMINANT MOTIVATION

5.1. Worker Motivation

Workers in any company would love one aspect to remain them strolling. Most instances the wage of the worker is enough to measure her or him operating for an employer. However, commonly just about going for walks for ordinary fee is not constantly comfortable for personnel to stay at accomplice in nursing leader. Associate sheepskin employee have to be forced to be driven to paintings for accomplice in nursing leader or corporation. If no motivation is gift in associate degree worker, then that workers First-class of hard work or all add popular will deteriorate. Whereas motivating associate sheepskin target audience, you will use common mental characteristic methods in which or specific psychological characteristic appeals. Trendy mental function strategies consist of

business organization as important business employer and temperament kind. Industrial agency strategies have logical appeals, emotional appeals, recommendation and praise. Commercial corporation ways in which have barter, outnumbering, stress and Rank. As well, you may think approximately basing your technique in your target market temperament. Precise mental function appeals goal obvious records, emotions, right and incorrect, goal marketplace rewards and target audience threats.

VI. CONCLUSION

Motivation is that the purpose and manner of the financial organization to pressure dad and mom to adopt to try to do bound behaviors. Enter needs is also concept-approximately as tries to deal of capability are becoming worried. As a change, an aggregate that created excellent elements of behavior is describing. Motivation is not constantly the conduct, one problem or a specific occasion its miles rapid decided. Elements of behavior region unit depicted with the collect of motivation embody: mentioned that the purpose conduct or behavior that is placed conduct at a few stage inner which health and electricity is spent. in outstanding phrases, as presently as we have a tendency to vicinity unit ready to get that behavior is caused as currently as behavior is stimulated to pursue a selected motive or even as the occurrence or severity and thus the ground electricity is absolutely actually exclusive from the preceding scenario, as a result, the fundamental diploma motivation refers to two surely exceptional issues.

REFERENCES

- [1] Alvarez, V. (2005). Engaging students in their own learning. *Leadership*, 32(2), 12-15.
- [2] D. C. (2007). Measuring cognitive and psychological engagement: School Psychology, 44(5), 429-447.
- [3] L. (2013). Intrinsic motivation, extrinsic motivation, and academic achievement among Indian adolescents in Canada and India.
- [4] Sheldon, W. (1998). The impact of teaching strategies on intrinsic motivation.
- [5] G. M. (2007). Motivation learning environments.
- [6] Sutduean, J., Singa, A., Sriyakul, T., &Jermstittiparsert, K. 2019. "Supply Chain Integration, Enterprise Resource Planning, and Organizational Performance: The Enterprise Resource Planning Implementation Approach." *Journal of Computational and Theoretical Nanoscience* 16 (7): 2975-2981.
- [7] Singa, A., Sriyakul, T., Sutduean, J., &Jermstittiparsert, K. 2019. "Willingness of Supply Chain Employees to Support Disability Management at Workplace: A Case of Indonesian Supply Chain Companies." *Journal of Computational and Theoretical Nanoscience* 16 (7): 2982-2989.
- [8] Jiao, Y., Jermstittiparsert, K., Krasnopevtsev, A., Yousif, Q., &Salmani, M. 2019. "Interaction of Thermal Cycling and Electric Current on Reliability of Solder Joints in Different Solder Balls." *Materials Research Express* 6 (10): 106302.
- [9] Yu, D., Ebadi, A., Jermstittiparsert, K., Jabarullah, N., Vasiljeva, M., &Nojavan, S. 2019. "Risk-constrained Stochastic Optimization of a Concentrating Solar Power Plant." *IEEE Transactions on Sustainable Energy (In press)*, DOI: 10.1109/TSTE.2019.2927735.
- [10] Jermstittiparsert, K., Sriyakul, T., Sutduean, J., &Singa, A. 2019. "Determinants of Supply Chain Employees Safety Behaviours." *Journal of Computational and Theoretical Nanoscience* 16 (7): 2959-2966.
- [11] Sriyakul, T., Singa, A., Sutduean, J., &Jermstittiparsert, K. 2019. "Effect of Cultural Traits, Leadership Styles and Commitment to Change on Supply Chain Operational Excellence." *Journal of Computational and Theoretical Nanoscience* 16 (7): 2967-2974.
- [12] Jermstittiparsert, K. &Chankoson, T. 2019. "Behavior of Tourism Industry under the Situation of Environmental Threats and Carbon Emission: Time Series Analysis from Thailand." *International Journal of Energy Economics and Policy* 9 (6): 366-372.
- [13] Romprasert, S. &Jermstittiparsert, K. 2019. "Energy Risk Management and Cost of Economic Production Biodiesel Project." *International Journal of Energy Economics and Policy* 9 (6): 349-357.

- [14] Cao, Y., Huang, L., Li, Y., Jermstittiparsert, K., Ahmadi-Nezamabad, H., &Nojavan, S. 2020. "Optimal Scheduling of Electric Vehicles Aggregator under Market Price Uncertainty Using Robust Optimization Technique." *International Journal of Electrical Power & Energy Systems* 117: 105628.
- [15] Kasayanond, A., Umam, R., &Jermstittiparsert, K. 2019. "Environmental Sustainability and its Growth in Malaysia by Elaborating the Green Economy and Environmental Efficiency." *International Journal of Energy Economics and Policy* 9 (5): 465-473.
- [16] Jermstittiparsert, K., Sriyakul, T., &Rodoonsong, S. 2013. "Power(lessness) of the State in the Globalization Era: Empirical Proposals on Determination of Domestic Paddy Price in Thailand." *Asian Social Science* 9 (17): 218-225.
- [17] Jermstittiparsert, K., Sriyakul, T., &Pamornmast, C. 2014. "Minimum Wage and Country's Economic Competitiveness: An Empirical Discourse Analysis." *The Social Sciences* 9 (4): 244-250.
- [18] Jermstittiparsert, K., Pamornmast, C., &Sriyakul, T. 2014. "An Empirical Discourse Analysis on Correlations between Exchange Rate and Industrial Product Export." *International Business Management* 8 (5): 295-300.
- [19] Jermstittiparsert, K., Sriyakul, T., Pamornmast, C., Rodboonsong, S., Boonprong, W., Sangperm, N., Pakvichai, V., Vipaporn, T., &Maneechote, K. 2016. "A Comparative Study of the Administration of Primary Education between the Provincial Administration Organisation and the Office of the Basic Education Commission in Thailand." *The Social Sciences* 11 (21): 5104-5110.
- [20] Jermstittiparsert, K., Trimek, J., &Vivatthanaporn, A. 2015. "Fear of Crime among People in Muang-Ake, Lak-Hok, Muang, Pathumthani." *The Social Sciences* 10 (1): 24-30.
- [21] Jermstittiparsert, K. &Akahat, N. 2016. "Fear of Crime among Students of Kalasin Rajabhat University." *Research Journal of Applied Sciences* 11 (2): 54-61.
- [22] Yu, D., Wang, Y., Liu, H., Jermstittiparsert, K., &Razmjoo, N. 2019. "System Identification of PEM Fuel Cells Using an Improved Elman Neural Network and a New Hybrid Optimization Algorithm." *Energy Reports* 5: 1365-1374.
- [23] Tian, M., Ebadi, A., Jermstittiparsert, K., Kadyrov, M., Ponomarev, A., Javanshir, N., &Nojavan, S. 2019. "Risk-Based Stochastic Scheduling of Energy Hub System in the Presence of Heating Network and Thermal Energy Management." *Applied Thermal Engineering* 159: 113825.
- [24] Yu, D., Wnag, J., Li, D., Jermstittiparsert, K., &Nojavan, S. 2019. "Risk-Averse Stochastic Operation of a Power System Integrated with Hydrogen Storage System and Wind Generation in the Presence of Demand Response Program." *International Journal of Hydrogen Energy (In press)*.
- [25] Jabarullah, N., Jermstittiparsert, K., Melnikov, P., Maseleno, A., Hosseinian, A., &Vessally, E. 2019. "Methods for the Direct Synthesis of Thioesters from Aldehydes: A Focus Review." *Journal of Sulfur Chemistry (In press)*.
- [26] Bowen, E. R. (2008). Student Engagement Quality Work Design: 2(1).
- [27] Brophy, T. (2003). Motivating students Mahwah, *New Jersey: Lawrence Erlbaum Associates Publishers*.
- [28] K. Nugroho, S. Sumardi, and S. Murdowo, "Mobile Cloud Learning Using UML and Feature Driven Development On Higher Education," *In Proceedings of the The 1st International Conference on Computer Science and Engineering Technology Universitas Muria Kudus*, 2018.
- [29] I. Istikomah and C. Budiyanto, "The Contribution of Educational Robotics and Constructivist Approach to Computational Thinking in the 21st Century," *In Proceedings of the The 1st International Conference on Computer Science and Engineering Technology Universitas Muria Kudus*, 2018.
- [30] R. Isnaini and C. Budiyanto, "The Influence of Educational Robotics to Computational Thinking Skill in Early Childhood Education," *In Proceedings of the The 1st International Conference on Computer Science and Engineering Technology Universitas Muria Kudus*, 2018.