

Understanding Teamwork Affects Ingenuity in Creative Initiatives

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Received: February 14, 2022

Accepted: March 22, 2022

Online Published: April 7, 2022

doi:10.5430/wjel.v12n3p39

URL: <https://doi.org/10.5430/wjel.v12n3p39>

Abstract

Representatives that are able to think independently and beyond the box are more likely to come up with unique and novel solutions to problems. This desire to solve problems might lead to new ways of doing things, better outcomes, and more efficient performance. In today's dynamic and changing economic environment, companies in any sector, including manufacturers, might certainly tolerate acting selfishly in their operations or the means by which they deliver products and services. As international markets and technological innovation continue to expose the manufacturing sector, businesses are being pushed to become more inventive in order to meet client needs and engage on a worldwide basis. As technology and innovation professionals prepare for future leadership roles in their firms, it's vital that they understand creativity and how to foster it among their peers. Employees are encouraged to cooperate when they are given the chance to be creative, according to the key contribution of this article. They solicit feedback from their co-workers when they have new ideas. The most intriguing component of offering a place for creation and invention was the creative process's design to foster collaboration and coordination. Several undergraduate engineering schools are gaining traction and integrating creativity into their curriculum, recognizing the realities of the corporate world and the necessity for creative problem-solving skills development. Creativity may be taught and people can be encouraged to come up with fresh ideas. On the other hand, teamwork and team teaching provide a lot of advantages. The current research will educate students about creativity and innovation, as well as how to foster it among their co-workers, in order to prepare them for future supervisory roles. Furthermore, the study's findings will benefit in the development of individualistic thinking abilities.

Keywords: creativity, development, innovation, learning, performance, teamwork

1. Introduction

Companies must rely on innovation, creativity and innovation to compete on a global scale and overcome the complex and dynamic difficulties of the industrial sector. The period of aggressive gratification is gone for eternity, and now every company must strive for continuous improvement in product and service delivery. If a firm is to flourish, its management and employees must learn to think creatively. Technology and innovation courses and seminars should emphasize the development of intellectual thinking talent for strategic planning. For many years, the author has used a team-oriented learning technique to teach "creativity in business and industry" to engineering technology and economic academics. As this paper will show later, programs in organizational leadership based on the team concept can enhance creative thinking and offer many advantages over metacognition (O. M. Carson, E. A. Laird, B. B. Reid, P. G. Deeny, and H. E. McGarvey 2018, M. L. Loughry, M. W. Ohland, and D. J. Woehr 2014, M. Kleinsmann, T. Sarri, and M. Melles 2020).

1.1 Creativity's Importance in the Manufacturing Company

As a result of global rivalry, business leaders and employees around the world are being forced to become more innovative and inventive problem-solvers. As hardware and software changes as well as continue to dominate the manufacturing industry, executives and employees must possess the thinking skills to design innovative means to access services on a global scale. The educational institution has worked meticulously to support creative data-based

decision-making in the acceptance of the responsibilities of future leadership of diploma students. Future leaders, such as students, will have a significant impact on upcoming events that will have a global impact (V. Sharma and K. K. Gola 2016, R. Sharma, A. K. Goyal, and R. K. Dwivedi 2016, A. Saleem and A. K. Agarwal 2016).

1.2 Definition of Creativity

These are some of the brain theories presented in the coursework, for example, is the split-brain idea. The human brain, including this hypothesis, is split into two hemispheres, each of which is responsible for a number methods of learning. The side of the brain is in charge of scientific, linear, logical, methodical, and mathematical perception, while the right hemisphere is in charge of creative, intuitive, and overall mind-set (K. K. Gola, V. Sharma, and R. Rathore 2016).

1.3 Decision Making

Identifying decisions, obtaining information and evaluating possible measures are all steps in the decision-making process. By gathering important information and identifying alternatives, a step-by-step decision-making process can help you make more careful, well-thought-out decisions. This method improves the chances that you will choose the most enjoyable option.

Step 1: Decide what you want to do

- You believe that you have to make a choice. Try to explain the nature of the choice you have to make. This is an important first step.

Step 2: Collect relevant data

- Before making a choice, gather some relevant information: what information is needed, the best sources of information, and how to get it. This level includes internal and external "labour". Some knowledge is internal, and you must discover it through a self-evaluation process. Other information comes from the outside world: it can be found on the Internet, in books, from other people, and from other sources.

Step 3: Make a list of options.

- As you collect the information, you will see many different options or paths to choose from. You can also make new choices using your creativity and other facts. This step involves making a list of all viable and desired options.

Step 4: Put the Evidence to the Test

- Use your knowledge and emotions to imagine what it would be like if you followed each option to the end. Check whether the requirement stated in step 1 can be satisfied or answered using each of the options. As you go through this difficult internal process, you will begin to prioritize specific options: those that stand a better chance of helping you achieve your objective. Finally, rank the options in order of importance, based on your personal value system.

Step 5: Choose from various options

- After you have examined all the data, you are ready to choose the option that seems most suitable to you. You can also choose a mix of options. The Step 5 option may or may not be the same or comparable to the option you placed at the top of your list at the end of Step 4.

Step 6: Do Something.

- You are now ready to take affirmative action by implementing the option you chose in Step 5.

Step 7: Think about your choice and how it will affect you.

This same ingenuity of such employees will be seen as a highly useful antecedent of performance for innovation to active groups including research and development (R&D) companies as they are not only looking to take innovations to the next level, but also to improve the quality of their employees. Visualize items that are distinctive but valuable to differentiate your product. Firms are using teams to integrate the creativity of their employees while maintaining operational efficiency. Individuals form relationships in special partnerships to combine their diverse skills and abilities. Despite the increasing focus on the benefits and originality of teams in innovative work, there is still a lack of information on team-level factors that can influence the system of creative vision in teammates and on project outcomes such as service quality, improvement can affect its effect (K. Gulista, G. K. Kumar, and R. Rahul 2016, J. S. Kushawaha and B. K. Misra 2016).

1.4 Learning

Learning is the process of acquiring new information, skills, values, opinions and preferences through the acquisition of new understandings, information, behaviours, skills, beliefs, mind-sets and preferences. Humans, animals and some robots all have the ability to learn; there is also evidence that some plants can learn. Learning something as a result of an event occurs immediately, but most skills and information are acquired over time. Learning replaces people for a lifetime, and it's hard to tell the difference between taught information that seems "lost" and stuff that can't be brought back.

As a result of continuous interactions between individuals and their environment, human learning begins at birth and continues until death. Educational psychology, neuropsychology, cognitive science, and pedagogy are among the fields that study the nature and processes of learning. Study in these subjects has resulted in the identification of different types of learning. Learning can result from habit, classical conditioning, operant conditioning, or more sophisticated behaviours such as play, which are found only in very intelligent species. Learning can occur either consciously or unconsciously. When you realize that you cannot avoid or avoid an unpleasant situation, you may develop a condition known as learned helplessness.

1.5 Collaboration

Collaboration is the process of two or more individuals, institutions, or organizations working together to accomplish a goal or to achieve a goal. Collaboration and collaboration are two words that are sometimes used interchangeably. Most collaborations require leadership, although this leadership can take the form of social leadership within a scattered and egalitarian organization. When faced with competition for scarce resources, collaborative teams are more likely to have access to more resources, recognition and incentives.

Structured collaborative strategies enhance behavioural and communication reflection. These techniques are designed to help teams succeed when they work together to solve problems. The concept of anti-cooperation is evident in conflicting motives, although this is not the typical use of the phrase. Cooperation is a strategic relationship in which all participants agree to cooperate strategically to achieve a common result," according to the dictionary definition. Figure 1 discloses the five factors that are formulating teamwork (G. Khan, K. K. Gola, and R. Rathore 2016 , S. Garg, R. K. Dwivedi, and H. Chauhan 2016).

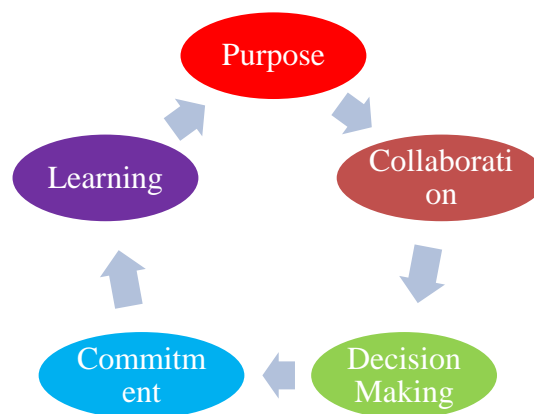


Figure 1. Illustrating the Factors Affecting Teamwork in a Manner

Creators examines how teamwork protocols affect the relationship between creativity-related abilities and team performance, with a focus on the organizational level of the study. Domain-relevant skills (talent related to a certain issue domain) are distinct from people's ideas (creativity and association skills), as described by sociable. Access to high levels of team collaboration, often referred to as teamwork, or possible modes of teams, has a variety of implications, restricting the use of creative abilities while limiting the development of copyrighted talents.

The key point of our copyright skills argument is that in order to fully cope with the highly complex, unique, unknown and dynamic nature of creative projects, teams must have cross-functional collaboration to combine their skills on a common team task. On the other hand, we believe that collaborative techniques reduce the impact of team creative efforts on success. This perspective is based on the belief that innovation as a practice, or the production of a variety of ideas or solutions for a particular problem, is beneficial. Team collaboration, on the other hand, is likely to

cause severe convergence pressure, which limits the application of creative talent and the impact they have on the quality of the game in new items (Shalini 2016, P. Pandey, G. Joshi, and K. K. Gola 2016).

2. Literature Review

Lohmann et al. in their study suggested that despite mounting evidence demonstrating learning may improve learning outcomes, trainers have battled to implement real line-up knowledge term-based learning (TBL) into the process of learning and teaching. For bachelor of education business students at seven colleges and Hong Kong, author evaluated the potential of online virtual classrooms as a tool to promote real TBL. Focus groups with 14 students assist quantitative method of 365 questionnaires. The links between cooperation, learning results, and satisfaction are modelled using structural equation modelling. Qualitative findings back up the statistical models and are offered to provide additional context and conceptual depth. The results confirm our hypothesis that internet marketing games create an actual TBL culture that nurtures the development of governance instructional strategies via socially constructed meaning, hence contributing to student motivation. This intellectual contributions points to other study directions as well as some practical consequences for educators who use three - dimensional computer methods (G. Lohmann, M. A. Pratt, P. Benckendorff, P. Strickland, P. Reynolds, and P. A. Whitelaw 2019).

Berduzco-Torres et al. in their study suggested that Family is a crucial source of emotional support since it is where people learn the social skills, they need to form meaningful human interactions. Various biopsychosocial theories have examined this impact throughout the course of a person's life. Empathy, cooperation, and continual learning have been defined as distinct characteristics of professionals in medicine that are particularly important in clinical rotations and in the well-being of doctors at work. The purpose of their investigation was to demonstrate the following hypothesis: Surgical subspecialties' growth is linked to their impression of alienation within childhood family in the lack of particular instruction in empathy, collaboration, and lifetime learning capacities. A cross-sectional study was carried out at Cusco's (Peru) only two medical schools, one independent but the other public. The family environment was assessed by measuring mother-son and father-son connections, as well as family loneliness. In addition, data on sex, doctorate, academic accomplishments, and area of origin was gathered to eliminate any potential biases. The variables evaluated were subjected to comparative, correlate, plus multiple regression analysis. Furthermore, family loneliness was shown to have a negative relationship with empathy, collaboration, and learning. Despite having a favourable connection with one's mother was linked to improved acquisition of empathy and educational capacities across the board, only the private medical insurance school group had a comparable benefit in father-son interactions. Finally, a multiple regression model based on a lineal association with cooperation ($p < 0.001$), lifelong learning ($p < 0.001$), and personal loneliness ($p < 0.001$) explained 43 percent of the variability of empathy in the public medical group. These data support the notion that familial loneliness hinders medical professional growth. They also believe that the family, particularly parents, plays a key role in the development of understanding, collaboration, and talents in medical students. Finally, these data revealed significant discrepancies between primary care health school students (N. Berduzco-Torres, P. Medina, B. Choquenaira-Calla ñaupá, M. San-Mart ín, R. C. Delgado Bolton, and L. Vivanco 2020).

Riivari et al. in their study suggested that it looked at how a program aimed at studying videogames could be used to teach and develop cooperation skills. A loss introduction class at a major Finnish institution used the software. The authors focused on the attitudes and significant learning outcomes of students working together to improve through play, and our research indicated two key learning outcomes. For starters, the software educational game prompted students to reflect on and analyse their individual team duties. Furthermore, despite the fact that sport taught students the need for continuous information sharing in collaboration, their assessment of team success was primarily oriented on performance; Students viewed efficiency as a measure of effective teamwork. This example demonstrated the benefits and limitations of using cloud course content as a constructivist tool. The authors assessed what sport expects from students and coaches in order for them to be effective, as well as how sport can teach organizational principles other than efficiency (E. Riivari, M. Kivij ärvi, and A. M. L äns ä2021).

3. Discussion

3.1 Listening Skills

In the communication process, listening refers to the ability to hear and analyse communication accurately. Effective communication requires the ability to listen. Messages are easily misunderstood if you don't know how to listen well. As a result, communication breaks down, and the sender of the message may become angry or upset as a result. Listening is a communication skill that you should strive to learn. Scrum is a project management paradigm for creating, delivering and maintaining products in a complex environment. It was originally focused on software development, but is now used in various industries such as research, sales, marketing and advanced technologies.

Many top firms train their employees to have listening skills as it is very important. It is not surprising that effective listening skills can lead to higher customer satisfaction, greater productivity with fewer errors, and enhanced information exchange, all leading to more creative and inventive work. All-scrum teams, particularly continuous integration, need developers to meet face to face to plan work, discuss concerns, and try to solve. Scrum is a prominent project management tool. Daily brief meetings are required as part of the agile approach (scrums) (S. Shukla, A. Lakhmani, and A. K. Agarwal 2016)

So instead of facial landmark conversation, rely on browser interactions meetings. There are various advantages of using the internet for information. Face-to-face meetings provide a number of benefits that online gatherings do not. The Yahoo/Google team also functions as a central hub for information. Platform for communications everyone in the team communicates. Messages posted on the group's website are the only way to communicate. Letters and texts and calls are used to communicate with the outside world. Although it is feasible, all such talks must be recorded. As group communications, they were summarized as well as documented (S. Shukla, A. K. Agarwal, and A. Lakhmani 2016) .

All team conversations are kept on file, which comes in useful in the future. A wide range of circumstances Furthermore, a short perusal of the faculty may use messaging recordings. There is team cooperation going on, as well as providing timely information. Figure 2 shows the effective team management roles of the system.



Figure 2. Effective Team Management with the Productive System

The work on the project is divided into two once a week sprint cycles. According to the agile SCRUM approach. At the moment, the squad is required to complete each sprint cycle. Supply a collection of items that are defined each of us must work together to accomplish this. The team develops precise plans and timelines for the actions to be carried out. During each sprint to be completed and items to be created specific duties for certain activities to be completed each team is given tasks to do and items to make member. The team is fully responsible for the planning and execution of the project. Inside the sprint cycles, planning, performing, and monitoring tasks Students assess their progress in relation to the dash plan and make decisions. According to the guidelines According to the SCRUM principles, sprint cycles are timed, i.e., they must be completed within a certain amount of time. There are no extensions to the two or three sprint cycles (M. Mehdi, D. Ather, M. Rababah, and M. K. Sharma 2016).

Tasks that must be completed in order for a sprint cycle to stay unfinished, it must be finished in the future When issues like these arise, All associated conversations are recorded automatically. Faculty may check communication trails from Yahoo/Google groups. These communications to receive a heads-up on prospective issues. The project's long-term timetable and goals include at the conclusion of each sprint cycle, the results are evaluated. Any important information Deviation from the proposal's established goals necessitates Faculty permission is required, as well as consensus among all teams. Because of this, the hero project was able to be completed by teams (G. Khan, B. Gupta,

and K. K. Gola 2017).

3.2 Goal Oriented

According to the business psychology degree, goal orientation describes how individuals and organizations conduct themselves to achieve their key goals. Goal orientation is a form of business strategy that influences how a firm responds and prepares for future initiatives. While all organizations are inherently goal-oriented in some form, goal orientation is important in setting focus and allocating funds. Effective managers and information and technology initiatives both benefit from goal orientation. The degree where a person or group focuses on activities and the end consequences of those efforts is known as goal orientation. Strong goal orientation supports focusing on the activities' intended outcomes rather than the work themselves, and how those outcomes will affect the individual or the firm. Those that have a strong achievement will be able to properly assess the consequences of achieving the objective, as well as their potential to achieve that real tactical goal with their present resources and talents.

3.3 Reliability

Reliability is probably the most important quality corporations want from their assets. One of the strongest indications that an asset is operating at its best is its ability to meet expectations. For every business in a capital-intensive industry, reliability management is important. Recent advances in asset performance science and entrepreneurship have improved the industry's ability to monitor dependencies and make educated production, quality and cost choices. Informed decision making helps the corporation reduce overall risk (R. Priya and R. Belwal 2017, A. Jain, R. Dwivedi, A. Kumar, and S. Sharma 2017).

4. Conclusion

The manufacturing business now faces a very different competitive environment than it did hundred years previously. Rate of technological advancements have affected how businesses sell incentives and produce goods. Production businesses cannot afford to continue on their goods, production lines, market positioning, or skill building in today's market. Engineering and design undergraduates need creative thinking schooling to further their livelihoods and address the competition difficulties that their prospect vie employees face.

With so much exposure to a company, it's clear that innovation is not an afterthought. Rather, the longevity of a company depends on its ability to create a creative environment. The biggest way to foster innovation in a company is to support activities and methods that break down barriers, shift the culture from resistive to resourceful, and reward innovators. Following are some of the most essential tips to achieve this.

- Link innovation to the core cultural values of the organization.
- Make the most of the physical workspace by creating a sense of urgency for change.
- Create a framework that best suits the innovation needed, and develop a culture that supports it.
- Celebrate successful inventions publicly.
- In order to allocate resources effectively, examine which of the most important barriers to innovation are considered rather than actual barriers.
- Interviewing innovators within a company to learn about the barriers that prevent them from putting their skills to good use.
- To improve collaborative efforts, provide an accessible internal database system for all new ideas within the organization.
- All workers should get education and training.
- Build teams and organizations with different abilities and analytical perspectives.
- The goals and objectives of a creative culture should be communicated to all workers in a clear, consistent and timely manner.

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