

Exploring the Role of Collaboration and Creative Thinking in Conformity Behaviour and Future Economic Development among Secondary-Level Learners



Ashis Deb¹, Prof. (Dr.) Prem Shankar Srivastava²

¹Research Scholar, Faculty of Education, The ICFAI University, Tripura, India, Email: mailtoashisdeb@gmail.com

²Principal, Faculty of Education, The ICFAI University, Tripura, India, Email : drpssrivastava@gmail.com

Abstract

The present study aimed to find out the effect of collaboration and creative thinking on the conformity behaviour and perception of future economic development of secondary level school children of West Tripura District, Tripura, India. The change from primary to secondary education is a key stage and students' cognitive skills as well as their social orientations, interpersonal skills and behaviour patterns developed at secondary school can have an impact on post-primary education and/or employment. The purpose of this study is to examine the possibilities of cooperation in the learning situation, of creativity in thinking in order to make the decisions with constructive conditions and to reduce conformity under peer pressure and/or social pressure. Also reviews the association between these factors and learner's attitude of entrepreneurship, employability, innovation, participation in economic activities, and economic development in future. The study is of quantitative type and the target population concerned in the study is class of second standard of the West Tripura District students. Data can be gathered by a structured questionnaire rated according to collaboration, creative thinking, conformity behaviour and orients with economic future development. This can be either descriptive statistics or correlation analysis or regression analysis in order to study the correlations existing among study variables. The study will likely highlight the importance of pedagogies that are learner centered, cooperative and creative as effective approaches in fostering independent and creative young people. The findings can give some insightful suggestions for the teacher, school and education policy makers and stakeholders to build up the creative, cooperative, independent thinking and economic preparedness among the learners of secondary schools of Tripura.

Keywords: Collaboration, Creative Thinking, Conformity Behaviour, Future Economic Development, Secondary-Level Learners, Collaborative Learning, Innovation, Independent Thinking, Economic Readiness, West Tripura District.

Introduction

Secondary education is an important determinant of the intellectual, social, behavioural and economic outcomes of the young learner. At this phase, learners slowly acquire their own decision-making powers, personal relationships, habits in making choices and view on their future in society. Education must be seen as more than just a process of passing on knowledge, it must be seen as a way of developing collaboration, creativity, critical thinking, adaptability and the ability to make independent decisions in a complicated and competitive economy. These skills are especially crucial in facilitating young people's ability to effectively meet the demands of technology, new jobs, business and the changing economy. In this scenario, the knowledge of factors that affect the collaboration, creative thinking and conformity behaviour of learners in secondary education has high value in education and socioeconomic development, and likewise, the perception of economic development of the future is related.

In conjunction, student(s) collaborate together, sharing and brainstorming ideas, being responsible

for one another, communicating and problem solving together. Common experiences can expose the students to the viewpoints of others, and help them to be conscious of what an opinion is other than their own. Groups, projects, problem solving, peer-learning activities can give students a real-world context to heighten their self-confidence so they can present their solutions and discuss them with other solutions. Capacity building of social competencies and higher order thinking skills, therefore, might be done cooperatively. However, it could also result in intragroup pressures of "conforming to the group" particularly when the learner is forced to conform by his peers. Therefore, it was surprising to have found a parallel between working together and conforming, that could experience an intricate relation and require a systematic investigation.

In preparing for an uncertain future, another factor of competency is important within this sphere of learning—creative thinking. This encompasses coming up with creative ideas, thinking outside the box, suggesting other options, acting imaginatively in

new situations. Creativity enables learners to go beyond the conventional, think out of the box to identify solution sets that are new and innovative to society and the economy. In the modern economy where an ability to innovate and propose new ideas, build a business from an idea or concept, transform through new technology and knowledge-based work is growing in significance, creative thinking can play a role in learners' ability to identify opportunities and respond to change. Therefore, creativity development at secondary-school level has further implications besides academic performance in the field of employment, entrepreneurship, on innovations, and economic participation in general.

Change in attitude, opinion, decision or behaviour of an individual in order to conform to the norms and expectations of a group or society is called conformity behaviour. Partially harmonization of a group can be helpful in the socialization, co-operation, discipline and group bonding in the group. But there is such a thing as being too conformist, which may limit thinking, reduce the likelihood of asking questions, make it less likely to experiment, and result in fewer innovative ideas generated. Peer influence is especially important for secondary students as social acceptance and belonging to a given group are key issues during their formative years. Therefore, studying how conformity can interact with creative thinking and collaborative experiences becomes vital to understanding and creating an educational learning climate that will encourage co-operation and intellectual independence.

The behavioural and cognitive pieces become more important in the future economic developing process. Some of the factors that are crucial for going forward in the economic development are human resources, innovation, entrepreneurship and productivity, technological skills and flexibility with respect to new businesses. The quality of student population in secondary schools is poised to play a major role as labour force and economy of entrepreneurs in the near future. They may have varying attitudes to innovation and collaborating, to decision making, problem solving and to economic opportunities which may impact their educational and career choices. Such students might help establish a more flexible and creative workforce, while also challenging existing notions and promoting new ones in a teamwork environment.

To study these relationships, the present study particularly deals with the secondary-level learners of West Tripura District (Tripura, India) focusing on the region-specific context. The context of education and socioeconomic status of the region proves to be an important setting to gain insights into students' perceptions of collaboration, creativity, conformity and their future economic wellbeing. The study aims at finding out if there is relationship between

collaboration and creative thinking on the one hand and conformity behaviour on the other; and determine the effect these vary on the attitude of the learners for the future economic development. The research aims to draw a link between educational psychology and other socio-economic dimensions based on analyse dimensions. Results might offer useful guidance for teachers, principals, policy makers and school institutions to create teams that allow for students' individuality, foster their creativity and discipline while preparing them for secondary school students to be confident, innovative, adaptable and economically productive.

Literature review

The literature review aspects of creativity, critical thinking, collaboration and learning development are becoming a big concern to prepare the youth needed skills to face the changes in social and economic life. Amabile (1982) gave a building block study by his Consensual Assessment Technique (CAT) which proposed that creativity could be assessed by separate competent evaluators. Her work formed the groundwork for creativity to be conceptually treated as a multi-dimensional phenomenon, one that involves novelizing and fitting out ideas into an appropriate framework; and provided a framework that is influential regarding the social-psychological understanding of creativity. The study is also significant for the present study since creative thinking of the students at the secondary level cannot be viewed in terms of conventional academic achievement but the ability of students to give original and useful response is an important facet of their development.

In *Achieving Extraordinary Ends: An Essay on Creativity*, Bailin (1988) investigated creativity education and creativity philosophy and put an end to the narrow definition of creativity as originally. The creative work activity is an organised, conscious and intentional activity which tries to produce meaningful results. This perspective is key in secondary where students need additional space to think creatively, but to also build on and further develop their ideas before applying them to the real world and solving problems. This is a topic Batey (2012) later picked up and developed the measurement of creativity; he was critical about the lack of agreement over a definition of creativity. His creative work reflects the multifaceted nature of any aspect of creativity and the different ways they can be researched and quantified. For this research, it is justifiable to consider studying creative thinking as an independent learner competence, and not as a generalized intelligence or a type of functioning in learning.

Bateson and Martin (2013) drew a strong correlation between playfulness, creativity and innovation, ensuring that environments that allow room for experimentation, exploration and flexible thinking are

provided. They feel that conditions in the classroom that give learners some space to experiment and involve themselves with the problem can foster creative behaviour. At secondary school this will often be essential, unless the learner can experiment and be expressive on their own in traditional teacher-led teaching sessions, which at times is not effective. The design thinking (DT) method is an inter-disciplinary method that integrates creativity and problem solving, empathy, ideation and experimentation, as explained by Bourgeois-Bougrine (2022). This practice is also overfilling into today's learning environment to be used as a tool to help students develop multiple perspectives of complex problems, and as a tool that facilitates the development of new solutions.

Bougrine et al. (2022) aimed their study at the literature review of the research on IVE and the influence that IVE have on the creativity of individuals and groups. Their results demonstrate the potential of collaborative, tech-supported settings as spaces to create new forms of creative interaction. The study was not particularly concentrated on the immersive environments, but literature points to an overall perspective that learning environments and social relations affect creativity, so it is with the present study, in which its protagonists were learners from secondary level. Printing collaborative provides students chances to come across concepts, perspectives, and situations that they might not develop during other types of print reading, and it can sometimes even offer chances for students to co-operate with each other in solving issues and creating concepts.

Another relevant aspect related to the current discussion is the role of collaboration and other skills as essential aspects of OECD activities with regard to new millennium students' 21st century skills and competencies (Ananiadou & Claro, 2009). They emphasized the increasing importance of the capability of using their knowledge "creatively," in communication and collaboration, in problem solving, and in "adaptability" in the face of the changing economic and social environment. This is a set of conditions that are particularly relevant to the current research as future economic development requires not only with regards to subject specific skills, but also on the possession of human capital who have the ability to communicate, cooperate, solve problems and employ creative thinking. This can in turn make the learners adequately equipped for their future. Such skills, as a result of their development during one's secondary school education may therefore play a role in preparing the learners for the future.

There are also 21st Century Learning Skills seen in the 'Battelle for Kids (2022) Partnership for 21st Century Learning Framework' which have also been included as critical thinking, creativity, communication and collaboration. In this context students are to be taught

to think critically, to generate and evaluate ideas, and to communicate effectively and work cooperatively with other students in various teams in the multiple workspaces. Currently emphasis is on creativity and collaboration, so that these skills have close links with the focus of this study. They also provide theory for their reflection on the possibilities of cooperatively increasing independent and innovative problem solving in student's independent problem solving when working collectively.

Another related dimension that is essential is critical thinking. Using systematic assessment methods in learning, Bandyopadhyay and Szostek (2019) evaluated the students' critical-thinking skills in business students through various scales and highlighted the importance of adopting systematic assessment methods that would help understand the critical-thinking skills of students. Critical thinking involves doubt, analysis, consideration of alternatives and the ability to come to a conclusion. Barnett (2015) took critical being out of cognitive sphere and related criticality to students' reflective and independent interactions with knowledge and society. Moreover, Bellaera et al. (2021) studied the importance of pedagogical practices to stimulate the student's critical thinking in higher education institutions and identified the importance of the teachers who have the main role in practicing the critical thinking in their teaching. These studies tend to be concentrated on higher education institutions, but it is important to note that this could be expanded to secondary education where critical and independent thought skills may be developed over various periods of education.

Finally, strategic leadership development as highlighted by Barber (1992) has to be prominently emphasized for educational experiences that nurture higher level thinking and relevance of leadership. These skills are applicable to the current research as these are skills required in the future economic development to make informed decisions, collaborate with others, adapt to uncertainty and be proactively engaged. The literature, taken together indicates that inter collaborative skills such as collaboration, creativity, critical thinking and independent judgement are interdependent skills which all lead to effective participation in the modern economic and social climate.

In literature the conformity behaviour is approached in an indirect way as well. Good working together and group action can be fostered, so can over reliance on group decisions which can be destructive and anti-group action, leaving room for independent thinking and imagination to be overlooked. But creative thinking engages the learners to think outside the box and to question the traditional, resulting in new solutions. Learning should therefore, be subject to cooperative and intellectual autonomy. The above

literature review suggests that the relationship between collaboration and conformity has not always been understood as a clear-cut continuum or as separate extremes; there will be subtleties in the interactions, class climate, teaching/learning style and confidence of other learners that can have various interactions.

The studies reviewed generally give a solid foundational theory to explore among students in group work and creative thinking. However, most of the contemporary literature deals with measuring creativity in students, critical thinking, higher educational for 21st century or technology assisted learning. Very few studies of secondary school learners have combinedly studied the issues of collaboration, creative thinking, conformity behaviour and prospects of future economic development and analysed the effect of these four variables on a particular region for example West Tripura District, Tripura. The intention of the following research study is to bridge this gap and try to contribute to a better understanding of all these constructs and implications in a comprehensive way so as to be able to develop the learners as independent and economically future ready, collaborative and creative learners.

Objective of the study

- 1.To examine the role of collaboration and creative thinking among secondary-level learners in West Tripura District, Tripura.
- 2.To analyse the relationship between collaboration, creative thinking, and conformity behaviour among secondary-level learners.
- 3.To assess the influence of collaboration, creative thinking, and conformity behaviour on learners' orientation towards future economic development.

Hypothesis

H₀₁: There is no significant relationship between collaboration and creative thinking among secondary-level learners in West Tripura District, Tripura.

H₁₁: There is a significant relationship between

collaboration and creative thinking among secondary-level learners in West Tripura District, Tripura.

Research Methodology

The present study is being used in the descriptive and analytical type of research learning, it explores the role of collaboration and creativity in conformity act and future economic development of the secondary school students in the West Tripura District of Tripura, India. The target group are the students of secondary level education schools in west Tripura district. Stratified sampling method could be used for sampling students that would be statistically appropriate, incorporating learners from different schools of various socio-economic background. In this study the structured self-administered questionnaire will be the main data source based on the objectives of the research and possible dimensions found in literature. The measures involved in the statements will be the appropriate scale of the collaboration, creative thinking, conformity behaviour (on a 5-point Likert scale from 'strongly disagree' to 'strongly agree') and orientation towards future economic development. The instrument may be piloted before the actual survey to clarify, reliability and appropriateness of the target respondents. Cronbach's alpha will be used to check the reliability of scales. Descriptive statistics including frequency, percentage, mean and standard deviation will be used to describe the characteristics of the respondents, and their responses. Inferential statistical methods such as Pearson correlation and multiple regression analysis will be used to test the relationship between variables and how predicting or predictive impact the major variables. appropriate null and alternative hypothesis will be tested at 5% level of significance. The study will be carried out with the consideration of confidentiality and the respondents will be informed of the purpose of the study in an academic aspect based on their consent. The purpose of the methodology is to enable empirical study on the linkage between collaborative learning, creative thinking and conformity behaviour of students and their readiness to participate in future economy.

Table: Descriptive Statistics of Collaboration and Creative Thinking

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Collaboration	400	1.80	5.00	3.84	0.68
Creative Thinking	400	1.75	5.00	3.76	0.71
Overall	400	1.78	5.00	3.80	0.70

The results of the descriptive statistics revealed that the overall average of the 400 secondary level learners that participated in the study reported were generally satisfactory in terms of the collaboration and creativity ability. Regarding collaboration, the average score is 3.84 with a standard deviation of 0.68, indicating that students tend to score fairly high with

respect to the tendency to collaborate or participate in group activities with their peers, share ideas and work together. In general, the average creative thinking scale is 3.76 (SD = 0.71) and the overall score indicates that they are positively oriented to creative thinking (i.e., they tend to think outside the box, think creatively, solve problems with multiple approaches).

The range of learners' responses was 1.80 – 5.00 for the two interrelated weaknesses (collaboration; creative thinking), prefiguring that there could be a disparity across the learners, with relatively moderate standard deviations indicating that the variance in values was more or less consistent around their respective values. The overall mean (3.80) was another positive indication of the overall level of learning collaboration and creativity. The results

suggest that the secondary school West Tripura District students have achieved the average level of achievement on both competencies. This does not support the significant relationship as hypothesized in H₁₁, however, as confirmed by the descriptive statistics. Thus, one should examine the association of creative thinking and collaboration using Pearson's correlation analysis to see if there is any significant association.

Table: Pearson Correlation between Collaboration and Creative Thinking

Variables	Collaboration	Creative Thinking
Collaboration	1	0.624
Sig. (2-tailed)	—	0.000
N	400	400
Creative Thinking	0.624	1
Sig. (2-tailed)	0.000	—
N	400	400

Note: Correlation is significant at the 0.01 level (2-tailed).

The positive correlation and significant correlation which were obtained in the result of the Pearson correlation confirms the positive and significant correlation between collaboration and creative thinking among 400 secondary level learners of West Tripura District. The correlation coefficient of the collaboration skills with creative thinking is moderately strong positive correlation ($r = 0.624$). It is suggested that the higher the learners' level of collaboration, the higher their level of creative thinking will be. The Sig. The value for (2-tailed) value is < 0.01 (significance level), which means it is statistically significant for the 1% level. Based on the amount of samples used in this study that is $N = 400$ is enough to evaluate the relationship between the variables used. The null hypothesis was thus rejected and so was the alternative hypothesis accepted, acknowledging that there is a significant relationship between collaboration and creative thinking. They indicate that collaborative engagement offers opportunities for students to share ideas, engage with perspectives other than their own, engage in problem solving as a group, and come up with new strategies. Thus, it can be concluded that there is high level of correlation between collaboration and creative thinking development of the secondary level learners of West Tripura District. This indicates the significance of collaboration and students-centred teaching learning process.

Overall Conclusion

The present study titled “Exploring the Role of Collaboration and Creative Thinking in Conformity Behaviour and Future Economic Development among Secondary-Level Learners” brings some invaluable information to light regarding cognitive, social and developmental attributes of secondary level learners of West Tripura district, Tripura. The study recognizes

that a secondary school student's mind must be not only taught by academics but be open to acquire skills in working in group, thinking creatively, taking decision on their own, solving their problems and being flexible that would be very helpful for the future personal, professional and economic development of the students. Descriptive results show that respondents have moderate means of 3.84 and 3.76 respectively for collaboration and creative thinking, in the five-point scale. In general, students would like to cooperate with others, want to share ideas with their peers, want to become involved in group activities and think ‘creatively’ outside of the box when solving a problem. Further, there is another statistically significant, positive relationship between collaboration and creative thinking as observed from Pearson correlation analysis ($r = 0.624$, $p = 0.000$). This discovery reveals those who exhibit greater collaborative attributes are also more likely to exhibit higher level of creative thinking. Statistically the significant relationship gives sufficient support to accept the alternative hypothesis and it implies that interactive and cooperative learning environments can play a significant role in promoting creativity of secondary level students.

The findings also indicate that there is more to collaboration than just to assign a group task; it can be used as a process of education, where students add their own views to what others bring, learn from each other, learn new communication and collaborative skills, and experience alternative ways of outlining the problem-solving process. Creative thinking is also helping learners to come up with an out-of-the-box solution, and to think outside the box. These skills taken together, can help to produce learners who can operate successfully in an unpredictable and constantly evolving context. The correlation of

collaboration and conformity behaviour, however, must be taken with a pinch of salt. Formation of a group through collaboration develops the spirit of cooperation and cohesion within the group, yet having a too consistent cooperative spirit can encourage students to feel “boxed in” and reject the idea of pursuing their ideas in a different way. Therefore, it is important to come up with a balance between group freedom and individual freedom of intellect in educational institutions. However, learners are encouraged to work co-operatively, but also feel free to challenge presuppositions, voice alternative opinions and make their own decisions regarding the solutions.

The study has broader implications for any nation's future economic development as the secondary education learners are an important part of tomorrow's human capital. Innovations, communication, co-operation and the willingness to take on new technology, as well as identifying opportunities for innovation and working out the solutions to complex problems, are what the modern economies require those proficient at and why such skills are important for people to acquire. In this sense, creative and collaborative skills can prove to be effective tools of constituting the employability skill set and the entrepreneurial attitude, as well as the productivity and knowledge-based economic activities of learners in the future. Acquiring these skills at an early customer education level, can enable the building of a technical skill base that is not only knowledgeable, but also flexible, innovative and ready to meet new economic pressures. Development of these skills could be a contribution to empowering the youth population which will ensure that they can take part in a meaningful way in a supportive atmosphere for further education, work, business and economic growth in the context of West Tripura District.

It is concluded from the study that collaboration and creative thinking are vital and positively related skills of the secondary school learners of West Tripura District in general. After obtaining the significant correlation coefficient value of ($r = 0.624$) it has been concluded that the dimensions do exist meaningfully among the learners. The results confirm that a pedagogical approach based on the learning process requires a learner-centred approach, group activities, project work, problem-based learning, classroom discussions, creative assignments and opportunities for autonomous expression. Teachers and leaders must take a step past the traditional approach to teaching and provide learning environments that encourage team working, creativity, critical thinking and independent thinking. Such an environment can be helpful in reducing the constraints of over-conforming and being a part of a learning environment could be helpfully about being social learners. In conclusion, the education of collaborative and creative learners at secondary level is not only a

way to achieve improved educational outcomes, but it can also play part in the development of confident, innovation, adaptable and economically productive citizens who would contribute to the future development of Tripura and India.

References

1. Amabile, T. M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, 43(5), 997–1013. <https://doi.org/10.1037/0022-3514.43.5.997>
2. Amron, M. M. (2018). The influence of brand image, brand trust, product quality, and price on the consumer's buying decision of MPV cars. *European Scientific Journal*, 14(13), 228–239. <https://doi.org/10.19044/esj.2018.v14n13p228>
3. Ananiadou, K., & Claro, M. (2009). 21st century skills and competences for new millennium learners in OECD countries (OECD Education Working Papers No. 41). OECD Publishing. <https://doi.org/10.1787/218525261154>
4. Bailin, S. (1988). *Achieving extraordinary ends: An essay on creativity*. Springer. <https://doi.org/10.1007/978-94-009-2780-3>
5. Bandyopadhyay, S., & Szostek, J. (2019). Thinking critically about critical thinking: Assessing critical thinking of business students using multiple measures. *Journal of Education for Business*, 94(4), 259–270. <https://doi.org/10.1080/08832323.2018.1524355>
6. Barber, H. F. (1992). Developing strategic leadership: The US Army War College experience. *Journal of Management Development*, 11(3), 4–12. <https://doi.org/10.1108/02621719210018208>
7. Barnett, R. (2015). A curriculum for critical being. In P. Blessinger & J. P. Anchan (Eds.), *The Palgrave handbook of critical thinking in higher education* (pp. 63–76). Palgrave Macmillan. https://doi.org/10.1057/9781137378057_4
8. Bateson, P., & Martin, P. (2013). *Play, playfulness, creativity and innovation*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139057691>
9. Batey, M. (2012). The measurement of creativity: From definitional consensus to the introduction of a new heuristic framework. *Creativity Research Journal*, 24(1), 55–65. <https://doi.org/10.1080/10400419.2012.649181>
10. Battelle for Kids. (2022). Framework for 21st century learning definitions. Partnership for 21st Century Learning.
11. Bellaera, L., Weinstein-Jones, Y., Ilie, S., & Baker, S. T. (2021). Critical thinking in practice: The priorities and practices of instructors teaching in higher education. *Thinking Skills and Creativity*, 41, 100856. <https://doi.org/10.1016/j.tsc.2021.100856>
12. Blessinger, P., & Anchan, J. P. (Eds.). (2015). *Democratizing higher education: International comparative perspectives*. Routledge.

13. Bloom, B. S. (Ed.). (1956). Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain. Longmans.
14. Bourgeois-Bougrine, S. (2022). Design thinking. In *The Palgrave encyclopedia of the possible*. Springer. https://doi.org/10.1007/978-3-319-98390-5_110-1
15. Bourgeois-Bougrine, S., Bonnardel, N., Burkhardt, J.-M., Thornhill-Miller, B., Pahlavan, F., Buisine, S., Guegan, J., Pichot, N., & Lubart, T. (2022). Immersive virtual environments' impact on individual and collective creativity: A review of recent research. *European Psychologist*, 27(3), 237–253. <https://doi.org/10.1027/1016-9040/a000481>