European Journal of Teaching and Education
ISSN 2669-0667

Project-Based Learning with or Without Multimodal Features: Action-Based Research for Developing and Assessing Intercultural Competence

Pushp Lata* and Sugandha Bhatnagar

Department of Humanities and Social Sciences, Birla Institute of Technology and Science, Pilani, India

ARTICLE INFO

Keywords:
intercultural communication competence,
project-based assessment,
project-based learning,
student engagement,
multimodal creative projects

ABSTRACT

The present paper proposes a framework for using "Multimodal Creative Projects" (MCP) for developing intercultural competence in engineering students. Instructors added a multimodal feature to improve students' learning experiences while engaging them in project-based learning. This feature provided numerous opportunities for multiple representations of content to students using text, video, audio, images, and comic strips that suited their diverse learning styles. We argue that, though both academic research paper writing and MCP, allow an instructor to carry out an assessment of learning as well as an assessment for learning, it is MCP that improves learner motivation, engagement, and learning outcomes better when compared to academic research paper writing. For collecting data for the study, a questionnaire was designed and circulated using Google Forms to 122 engineering students enrolled in the Cross-Cultural Skills course, being offered at the Birla Institute of Technology and Science, India, a premier engineering institute in India. The findings of the experiment indicate that the majority of the students who opted for MCP-based assignments found their mode of learning to be effective in making use of their core and creative skills and also providing flexibility, which enhanced their interest, engagement, and learning performance in the course.

1. Introduction

Effective Student Engagement is the key element in the academic processes and also poses a big challenge in the digital era. Student engagement refers to the amount of attention, inquisitiveness, interest, and passion students show while learning. Researchers try to measure it from the academic performance and academic achievement of students in a course (Delfino, 2019; Gbollie & Keamu, 2017). In fact, scholars have established that student engagement is reflective of the knowledge, skills, and experience that learners acquire while learning. Hence, teachers use different tools, techniques, and methods while teaching their courses to create a conducive environment for their students' better involvement and training. John Dewey (1938), known as the father of progressive education and proponent of social learning theory, believed

* Corresponding author E-mail address: plat@pilani.bits-pilani.ac.in

Cite this article as:
Lata, P., & Bhatnagar, S. (2023). Project-Based Learning with or Without Multimodal Features: Action-Based Research for Developing and Assessing Intercultural Competence. *European Journal of Teaching and Education, 5*(2): 65-79. https://doi.org/10.33422/ejte.v5i2.1028

that students learn best when in natural social settings and advocated providing learning opportunities that allow students to engage in appropriate social interactions with their peers. Similarly, David Kolb argued in his Experiential Learning Theory that knowledge that is integrated into learners' experience ignites interest in the subject and motivates them for taking up ownership of their learning and bringing the transformation of experience (Kolb, 1984). Experiential learning thus, engages students in the learning process through "learning by doing," where a teacher scaffolds students' learning. Vygotsky and Cole (2018) discuss this process of scaffolding learning in detail and focus on tapping the learning capability of the students and worked on the concept of the 'zone of proximal development (ZPD). They evinced a range of abilities of an individual which can be improved with the systematic guidance of an expert. For enhancing the ZPD of students in experiential learning, appropriate class setting and varied teaching-learning methods could be used, such as project-based learning, problem-based learning, collaborative learning, and flipped classroom teaching.

The present paper uses one of the above teaching-learning methods, i.e., Project-Based Learning (PBL), that allows for the design and delivery of experiential learning while incorporating technology in ways that assist students to get the knowledge and skills they need in the digital age (Moon, 2004). Project-Based Learning is a teacher-facilitated collaborative pedagogical approach wherein students gain subject knowledge and abilities to apply and resolve issues, challenges, and circumstances that actually exist in the real world. It might consist of carefully crafted pair work, group work, whole-class instruction, and individual learning activities. This pedagogical instructional strategy bridges the gap between theory and practice on the one hand and generates intrinsic motivation and desire for learning the subject on the other by supporting students in comprehending the practical application and utilization of domain knowledge. Learner engagement, peer and instructor feedback, and collaborative work are the three most important components associated with this strategy which give both the parties excitement of discovery.

The hands-on learning and discovery learning did not gain a widespread acceptance because educators did not base their efforts on "the complex nature of student motivation and knowledge required to engage in cognitively difficult work," nor did they pay adequate attention to students' perspectives (Blumenfeld et al., 1991). According to Kirschner et al. (2006), the reliance on limited and structured guidance in PBL impedes successful learning. Keeping the aforementioned critique in mind, the researchers in the present research included two major decisions while experimenting with the PBL, that are mentioned below:

(1) Added the multimodal component to give learners the freedom to employ their prior knowledge, skill set, and preferred mode of meaning-making representation;

(2) Created Multi-Staged Interaction and Intervention for better students' involvement and engagement

The theoretical underpinning of the experiment is based on the fact that students create their own learning materials, which they then present and evaluate as a group as part of a project that includes topic- or theme-based exercises suitable for a variety of levels, learning styles, and ages (Barrett et al., 2013). The current study investigates the use of PBL with a multimodal approach, named as Multimodal Creative Project (MCP), in this study. The multimodal component of PBL equips learners with a variety of modes for meaning-making in the placed setting for comprehending and portraying the socio-cultural landscape (Jewitt, 2008; Kress & van Leeuwen, 2001). The concept of 'Multimodality' has drawn certain ideas from the learning theories such as 'Constructionism' (Papert, 1980), and 'Constructivism' (Piaget, 1923) that emphasis on the importance of conceptualizing and constructing using a broad set of modalities. This social semiotic approach uses socially and culturally shaped resources such as

images, writing, layout, speech, moving images for meaning making (Kress & van Leeuwen, 2001). Moreover, multimodal learning (MML) builds upon a technology-rich world of digital tools and networks which according to the researchers' benefits teachers to achieve the learning outcomes of the course by customising and adjusting learning strategies accommodating the individual learning style and aptitude of each of the learners, particularly today's digital denizens (Ryoo & Winkelmann, 2021). By adding the Multimodal feature to PBL, the researchers as instructors provided students opportunities "to engage intellectually, artistically and technologically with design in multimodal text creations" (Wyatt-Smith & Kimber, 2009).

As previously stated, the main challenge with project-based learning is that while using PBL both teacher and students may lose the focus on the essential learning objectives and resultantly, the important aspects of the curriculum may not be covered due to scarcity of time. Consequently, project-based learning needs careful planning, designing, and monitoring by the teacher. For this reason, the researchers made conscious efforts to develop a model for applying a PBL with the multimodal approach as a method to engage students in learning, after carefully planning and designing the multi-staged intervention, as discussed in the succeeding section.

Therefore, in order to understand the effect of PBL approach added with a multimodal feature on students' engagement and learning, the following research makes an attempt to find answers to the following research questions:

(1) What is students' perception of the usefulness and feasibility of using a Multimodal Creative Project for developing intercultural competence?

(2) Is there a difference in the academic performance of the two groups of students? If it is so, does this difference reflect a positive and meaningful impact of using the multimodal feature on the academic performance of the students who opted for MCP as compared to those who did not?

In the ensuing section, the paper discusses the objectives, planning, and process of the MCP. Before discussing the MCP modalities at length, it is essential to know that the researchers gave students an option to complete the Academic Research Writing Project (ARWP), the conventional method, or use MCP as part of the take-home assignment (see Appendix). Since the major focus of the study is on the MCP experiment, the details related to ARWP have not been discussed here. However, frequent references have been made to show the contrast with the required details.

2. The MCP: Setting the Objective and the Learning Outcomes

The aims of the MCP were set as follows:

- To provide students with a real-life situation and use their theoretical understanding of the cultural models to make a nuanced observation of people, their profession, social behavior, rituals, and belief systems.
- To encourage students to take down notes and create or collect their inter alia to build the story of their intercultural understanding.
- To develop interest and motivation for learning, allow students to use different modes such as photography, poetry composition, cartoon strips, term paper; thus, making learners construct their own knowledge through experiential learning.
- To use the process-based approach with multiple-stage interaction between instructor and students.

2.1. Multimodal Creative Project Framework

The multimodal framework provides the theoretical underpinning for highlighting how students engage with the various modes and tools to make meaning in the MCP.

The selection of multimodality as the theoretical precept of MCP is based on the fact that it provides multiple modalities with socially and culturally appropriated resources for meaning-making, which motivate and engages the digital native students (Kumar & Lata, 2020). The proposed MCP model posits the pedagogical objectives, task and instructions (see Table 2). This model uses semiotic resources that were planned and used systematically. These semiotic resources have been seen as visuospatial modality (gesture, gaze, and body postures), accompanies the vocal modality in interaction (Norris, 2014). Therefore, in the purposed model two features were added to Project Based Learning viz (1) prior knowledge, skill set, and preferred mode of meaning-making representation of students and (2) created a Multi-Staged Interaction and Intervention for better involvement and engagement of students. For the content development here, students were required to reflect on their cross cultural understanding as well as the cross cultural aspects they wanted to project in the MCP.

For the proper analysis of the MCP submission, the projects were divided into four major categories that are the images, text, visual, and audio mediums. Based on the data collected through google form 86.4% appreciated the flexibility and the space, which enabled them to use the mode through which they could apply their knowledge and understanding of cultures. During the process at different phases students used a range of social-cultural artefacts (see the illustration consisting the collage example in the Appendix 2) and technological platforms like canva, mashboard. Besides using a wide range of modes for making meaning, MCP allowed students to function at their own pace, space and time continuums. Table 1. provides a detailed view of the multimodal tasks/ activities done in MCP. This prototype created by Jeffrey Mok in his paper highlights medium, representations, and modes (Mok, 2015). The present study has extended the model by including type and nature of the task.

Table 1.
Type, Media, Representations, Modes and Nature of the task

Type	Medium	Representations	Modes	Nature
Audio	Information/ Resource voice	Audio and digital text	Songs/Creating Audio recording	Information/voice modulation
Text	Written/ Visual human text	Human speech – verbal words	Poems/ writing skit Printed word on MS Word/ hand written	Concrete words, abstract expression, analogies, metaphors/ Interactional, conversational
Visual (videos, animated videos)	Camera/ Mobile phone	Computer screen display/ projector screen	Visual creativity and Visual digital image	Illustrative and Information/Resource image, facial expressions, body language, gestures
Images/ Paintings	Canvas/ Colors	Story telling/ comically distorted drawing	Story telling through graphic art	Engaging with visual cues, Facial expressions

2.2. Multistage MCP: Process-Based Intervention

Since MCP aimed at multi staged learning process. This project was implemented from the third week of the course, and students had final submission with performance and presentation deploying multimodal resources in the tenth week of the course. The entire MCP task was planned to be carried out in three phases that are as follows:

(1) Inside the class
(2) On the field
(3) Final Outcome: MCP

Table 2.
Multimodal Creative Project Framework

Stage	Timeline	Student's Tasks	Metacognitive Learning of Student	Instructor's Role and Tasks	Assessment and Evaluation
Inside the classroom Ideation of MCP	Week IV	The student reflects on their understanding of varied cultures based on cultural dimensions and comes up with possible ideas for MCP discussion.	The student brings their own experiences and constructs their new ideas and development	The teacher appreciates the ideas and asks questions to scaffold and also encourages other students to provide constructive suggestions if any.	Marks 10
Take-Home Submission of MCP Outline	Week V Week VI	Objectives, Mode(s) to be used, content and outline to be submitted on the Google Classroom	Clear and precise thinking, critical thinking, and creating the macro structure of MCP	Evaluation and feedback on the first draft	Marks 10
Field Visits Library/Nearby villages/Online and offline museums	Week VII Week VIII	Students carries out the field vists/interviews/video recording/poster making/paintings/skit writing/cartoon strips, etc. Students develop the complete MCP contents and post them on Google Classroom	Reflecting and creating MCP, Seeking and incorporating views and suggestions from instructor and peer group	Enabling and facilitating the quality of student's MCP ideas	Marks 10
Submission of Pre-final draft	Week IX	Students submit their pre-final draft via email or in-person	Preparing and organising the contents. In case of multimedia project, students were asked to submit it in person	During office hours, if students approach for feedback or any kind of guidance, instructor provides the same.	Marks 10
Final Submission	Week X			Instructor evaluates and provides feedback on the MCP submitted. Feedback on the first draft and evaluation	Marks 10

Note: MCP carried 50 marks i.e., 25% of the total course score

The assessment rubric was shared with the students to help them understand their level of learning achievement against the expected learning outcomes as specified in the course. The rubric of assessment is not being discussed here as the focus of the study is to know the students' perception about the use of multimodal-based PBL for developing Intercultural Competence in the Cross-Cultural Skills Course, a humanities elective in which they enrolled. However, it can be observed from task planning as given in the table, that the assignment was structured in a way where the entire focus was on "the process of learning- not just the final product", which has been termed as "staged multimodality" by Wyatt-Smith and Kimber (2009, p. 87). The key aspect of this kind of assessment is that it is learner-oriented as they are consistently working on their task, interacting and getting feedback from their teacher and fellow students at regular intervals of their MCP. So, this involves both 'assessment for learning' and 'assessment of learning'.

3. Methodology

3.1. Research Design

Action Research methodology was adopted for the present research. It benefits teachers to assess and improve their own teaching practice, which affects the student's learning; simultaneously, it helps in generating a knowledge base of teaching and learning, which aids in understanding the current educational or classroom situations **(Gillis & Jackson, 2002)**. Under this methodology, a comparative quasi-experimental design was employed in order to examine how the MCP pedagogical assessment design affects students' learning when compared to the traditional assessment design.

3.2. Research Sample and Tool

Since the instructors aimed at providing complete autonomy to their students for using their preferred mode for meaning-making for the task, all the 122 students enrolled in the Cross-Cultural Skills course had variegated types of project submissions. For the convenience of the study, the researchers have divided the assignments into two broad categories based on the nature of submissions, namely: Academic Research Paper Writing (RP) and Multimodal Creative Project (CP). In comparison to 45 students who chose Multimodal Creative Project based assignment (CP), there were 77 students who opted for Academic Research Paper Writing (RP) based assignment.

The Check All That Apply (CATA) type of item-based survey was developed in order to explore the usefulness of employing Multimodal based Teaching in developing intercultural competencies. Since CATA items help in exploring and understanding the application of a new concept or model, it was employed with the focus to collect the data from self – administered questionnaire in a non–tedious way and develop a comprehensive perception and detailed interpretation of the responses of the sample (Heim & Holt, 2021). The questionnaire was validated by two experts from the field of intercultural skills teaching. All 122 enrolled students responded to the questionnaire circulated via Google Forms. The students who opted for MCP-based assignment, were also asked to write and email their views about using the Multimodal Creative Project for developing domain knowledge and learning intercultural skills as the course's learning outcome. In addition, the written exams and the MCPs prepared by the students at the end of the course were also analyzed and evaluated.

Once the data was collected, the responses with missing values were omitted. Also, to ensure an unbiased and fair comparison between the two groups of students, the frequencies of the two groups were balanced. SPSS was used randomly select 45 cases from Academic Research

Paper group, to balance out 45 respondents from MCP group. Out of 45 MCP, 11 students composed poems, 11 students shot videos, 2 animated videos, 4 composed songs and audio-video recorded, 7 students drew paintings, 3 tried writing skit, 3 developed cartoon strips, and 4 students used photography to present their understanding into the different cultures. Then, the survey items were analyzed with the help of descriptive statistics, and frequency distribution graphs were prepared. The views of the MCP-opted students were used to complement the quantitative findings. In addition, the performances of the two groups in class assignment and End-Term Examination were compared using appropriate quantitative techniques.

4. Findings and Interpretations

Figure 1 displays the responses of the students as an overall sample as well as under their respective categories, namely Research Paper (RP) and Creative Project (CP). The major advantage experienced, as highlighted by the overall sample, was that their respective assignment type aided in improving their analytical thinking (78%). Based on Figure 1, it can be inferred that the students who opted for creative projects stated more benefits experienced from Multimodal Creative Projects compared to benefits experienced by students who opted for academic research papers from their type of assignment. For them, the major advantage was that MCP helped them use their core skills and creativity (82%). They reported the top 3 most prevalent or most agreed benefits perceived were that Multimodal Creative Projects:

(1) aided them in making use of their core skills and creativity,
(2) helped them get to the core matter of the course by probing questions to existing knowledge, and
(3) provided flexibility which created interest in the course, increasing their overall learning with enjoyment, respectively.

On the other hand, the students who opted for research papers-based assignment found academic research papers the top 3 most beneficial features in developing intercultural competencies as:

(1) improving analytical thinking,
(2) being an aid to get to crux of the course with the help of probing questions to the existing knowledge, and
(3) building links among the various concepts taught in the course, respectively

Further, the graphical representation (Figure 1) exhibits variance in the percentage of responses between the two groups on some of the aspects of using the two types of assignment as a tool for Cross-Cultural Pedagogy. The majority of the students who opted for creative project-based assignments found that Multimodal based Teaching aids in making use of core skills and creativity in developing Intercultural Competences (41%), whereas a difference of 17 points can be observed in the perception of the students who opted for academic paper-based assignments. Similarly, creative project students (37%) found flexibility in this teaching method which developed their interest toward the course that increased their overall enjoyment in learning and developing intercultural competencies, in comparison to their counterpart (26%). Third attribute where major difference between the responses of the two groups has been found, is the method being useful and effective tool for evaluation. Students who opted for creative project (30%) found MCP as a useful and effective tool for evaluation whereas only 20% of the students who opted for academic paper agreed that Academic Research Paper Writing is a useful and effective evaluation tool.

However, it is surprising to note that there are three aspects of the two types of assignment methods upon which both the groups of students have shown equal percentage of concordance with regard to their corresponding assignment mode. The aspects of Multimodal Creative Project such as, 1. understanding the concepts from simple to complex level (30%), 2. building links among varied concepts of the course (31%), and motivating self – learning (28%), same attributes of Academic Research Paper Writing have received similar percentage of concordance, respectively. The other facets that have been perceived as useful by both the groups, highlight that their corresponding assignment method helped in 1. improving one's active learning by developing the projects (CP – 31%, RP – 24%), 2. probing questions to existing knowledge to understand the core of course matter (CP – 38%, RP – 31%), and 3. improving analytical thinking (CP – 37%, RP – 41%). Overall, it can be observed that more than half of the student sample agreed that Multimodal Creative Project has multiple advantages to aid in the development of Intercultural Competence.

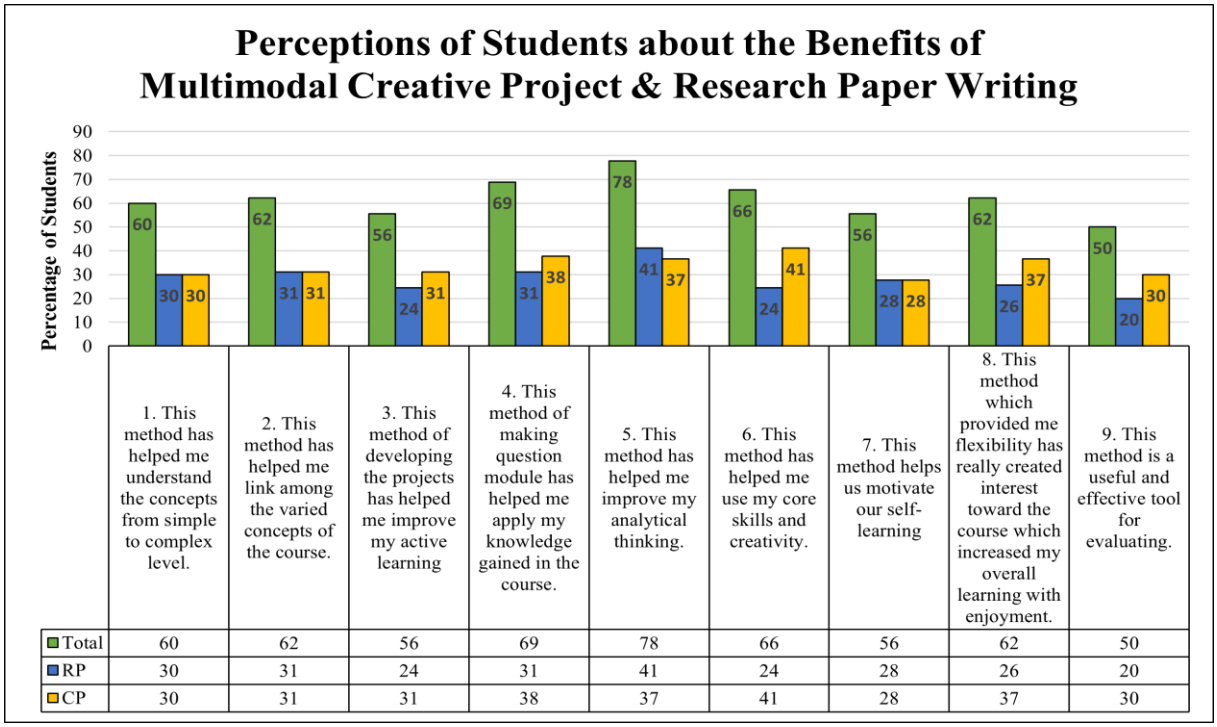


Figure 1. Students' Views on the use of Academic Research Writing Paper and Multimodal Creative Project

Upon focusing on the responses of the student group which opted for Creative Project based assignments only, from Figure 2, it can be elicited that the majority (82%) of creative project sample agreed that this mode provides a means of making use of one's core skills and creativity, such as using drawing, painting, poems composing, story writing, video making, photography and so on. Written testimonies of the students support the quantitative analysis of the research. Participant 11 shared, "*The multimodal special project allowed me to use my painting skills to present my understanding of the concept of time, context, and power which other students really appreciated when I gave a presentation on the same. Some of my classmates did not even know that I painted*". She further stated that she found *"this mode of teaching provided students time to reflect on their own skills and abilities, and make use of them in their learning process"*. Likewise, more than three – fourth of the sample of the creative project opted students (76%) found that this method made them probe the existing knowledge to get a better understanding of the course.

Participant 6 explained that it helped him understand how to brainstorm, conceptualize, discuss and manage a project, approach people, listening and learning from others and achieve better results. 73% of the sample found that the method improved their analytical thinking. Slightly more than 60% of the sample agreed that MCP helped in creating links among the varied concepts of the course. Also, a similar proportion of the sample (62%) found that this method improved active learning.

Participant 23 said, *"I really did not bother about the marks, as it was so interesting to work on the project. Not to necessarily write answers to questions… but being actually on the field and observing discussing with the group and presenting it in front of the entire class"*. This response extends to the survey results, which illustrated that slightly more than half of the sample size was affirmative that the method motivates self–learning (56%), in addition to conforming that this method is a useful and effective evaluation tool (60%), respectively. A similar proportion of the sample found that this method aided in understanding the concepts from simple to complex level (60%).

Similarly, participant 29 shared that "I will always be grateful for the efforts you took in providing us with real-life experiences like the village tour. Especially the special project has taught me some of the most important lessons for the rest of my academic life. For someone constantly struggling with stage fright, I was pleasantly surprised with myself when I was able to speak in front of my classmates for my MCP presentation and I will always be indebted to this course for such experiences". Therefore, from survey findings and written comments, it can be observed that most of the students favored multiple attributes of Multimodal based teaching. This infers that the students agreed that various features of this method are in play in making it an effective method in enhancing their learning experience.

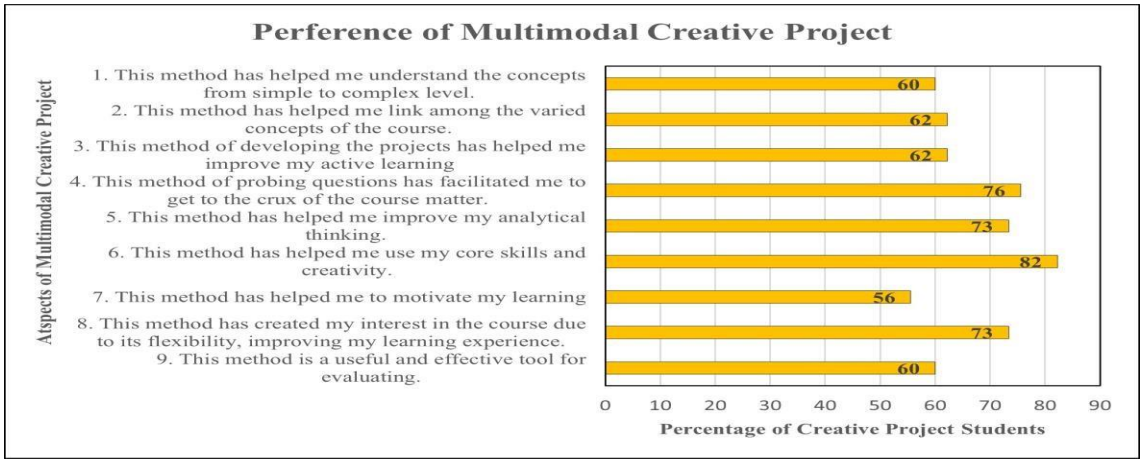


Figure 2. Multimodal Creative Project opted students' views on various aspects of Multimodal Creative Project

Figure 3 displays the performances of the students of the two groups on final assignment submission and end–term examination, respectively. The Figure 3(a) exhibits the scores obtained by the students on their final submission of their respective assignments. The horizontal axis represents the class interval of the evaluation scores out of 50 marks, whereas frequencies within the graphical line represent the number of students who have scored within the evaluation score class interval. The average of the student group which opted for research-based assignment was 24.4. On the other hand, a higher average was found for the student group which opted for multimodal-based assignment i.e. 28.3. Consequently, it can be inferred that creative project opted students performed better than students who had opted for academic research paper-based assignments.

Subsequently, on analysing Figure 3(b), it can be inferred that creative project-opted students performed better than their counterparts on end-term examination as well. The average score obtained by creative project students was 51. On the contrary, students who opted for research paper scored an average of 46 marks out of 70 Marks in the end-term examination. To support preliminary findings, the significant difference in the means of the two groups was assessed. t test reveals that there was indeed a significant difference (Table 2) between CP (M = 51.18, SD = 6.545) and RP (M = 46.67, SD = 8.421) in the end-term academic performance, t (88) = 2.837, p = o.oo6. The effect size for this analysis (d = 0.60) was deemed to be moderate as per Cohen's (1988) convention. These findings indicate that the students who opted for Multimodal Creative Project (CP) based assignment performed better than the students who opted for Academic Research Paper (RP) based assignment. Cohen's effect size value suggested a moderate practical significance of the computed t-test value.

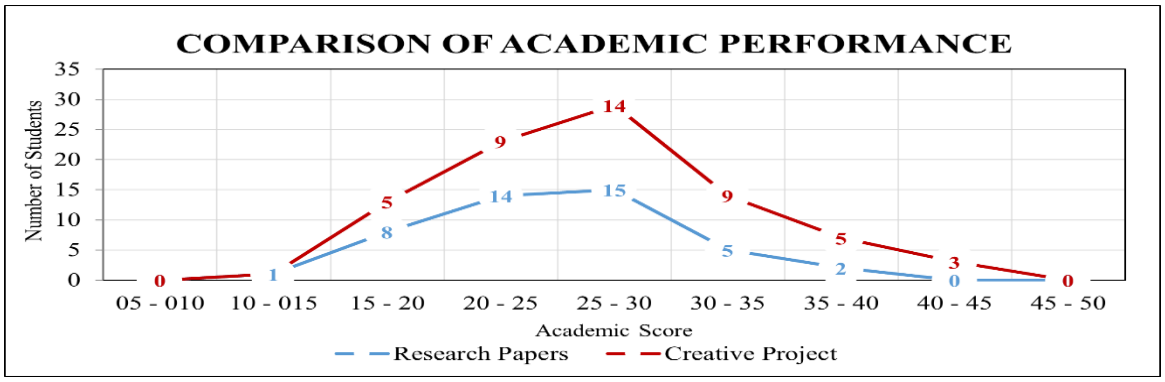


Figure 3.a. Comparison of Performances of the two group on Final Assignment

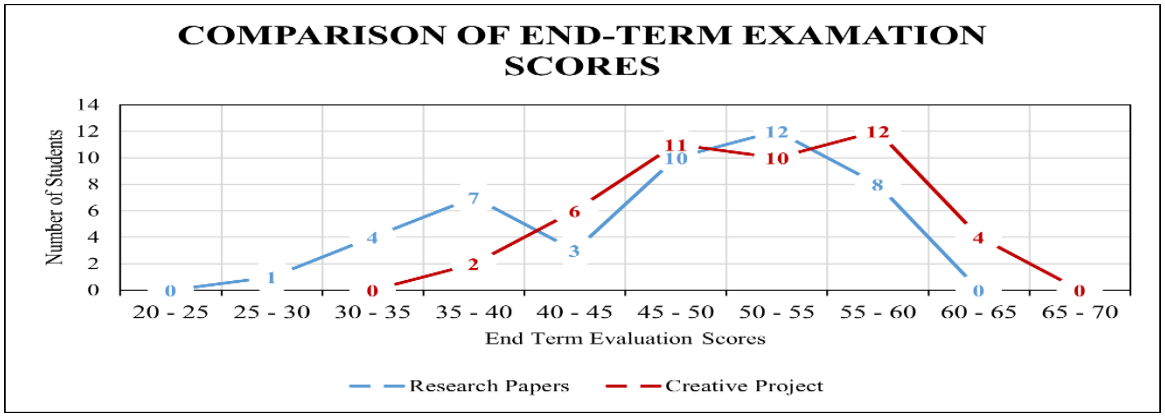


Figure 3.b. Comparison of Performances of the two groups on End-Term Examination

Table 3.
Significant Difference in the means between CP and RP students

Student Group	N	Mean	Standard Deviation	t test value	Degree of freedom	p-value*
Multimodal Creative Project (CP)	45	51.18	6.545	2.837	88	0.006
Academic Research Paper (RP)	45	46.67	8.421			

**Significant at 0.05 level (2-tailed)*

On the other hand, a significant positive correlation (Table 3) has been observed between the final assignment marks and end-term examination academic performance of the students who opted for Multimodal Creative Project (CP) based assignments.

Table 4.
Correlation between Final MCP assignment marks and End Term Examination marks of CP students

	End Term Examination		Final Assignment
End Term Examination	-		
	Pearnson's Correlation	0.981**	-
Final Assignment	Sig. (2-tailed)	0.000	
	N	45	

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

Complementing the observed differences in the end-term examination and MCP assignment assessment, one of the creative project opted students, Participant 36, upon reflecting on his performance throughout the course, shared, *"The course really helped us learning the concepts with the real – life examples. I was able to quote by own experiences in the end – term paper. This could be one of the courses where I always eagerly waited to attend the class every time as there was always something new to learn or reflect on. Through creative projects, I was able to use my own skills and creativity to complement my own learning"*. Thus, the responses to the open-ended question also corroborate with the findings as Multimodal Creative Project fosters a learning environment that creates intrinsic motivation and interest to work on the project, willingly.

5. Conclusion and Future Implication

The study's results revealed that like medical, science, and engineering subjects, PBL can be used for teaching humanities courses like Cross Cultural Skills at the university level. In fact, the study has established that adding multimodal feature to PBL enriches the usefulness of this method of teaching as it appropriately capitalizes on technology-driven aptitude of the students while providing the freedom of making use of their preferred mode(s) of meaning-making. Further, the study found a positive relationship between the students' involvement and motivation in the Multimodal Creative Project-based learning method and their academic results. The findings and students' testimonies exhibited that they were highly motivated to translate their understanding of their chosen cultures. The MCP experiment has successfully proven that the MCP method can be used for the assessment of learning and for learning if it is carefully planned and implemented with process-based pedagogy. Thus, despite the challenges, the MCP had positive effects on the development of intercultural competence in students. The significant contribution of the study lies in the fact that it has also given the framework for using MCP as a tool for assessment.

In addition, the additive nature of multimodality has wide scope that can be explored when combined with other pedagogical approaches. The future research can be taken up to explore the applicability of Multimodal Creative Project framework in other subjects in Humanities and Liberal Arts to create more inclusive learning environment.

References

Barrett, M., Byram, M., Lázár, I., Mompoint-Gaillard, P., & Philippou, S. (2013). *Developing the Intercultural Competence through Education*. Council of Europe Publishing.

Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J., Guzdial, M., & Palincsar, A. (1991). Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning. *Educational Psychologist, 26*(3–4), 369–398. https://doi.org/10.1080/00461520.1991.9653139

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Routledge. https://doi.org/10.4324/9780203771587

Delfino, A. P. (2019). Student engagement and academic performance of students of Partido State University. *Asian Journal of University Education, 15*(1), n1. https://doi.org/10.24191/ajue.v15i3.05

Dewey, J. (1938). *Experience and education*. Macmillan.

Gbollie, C., & Keamu, H. P. (2017). Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students learning. *Education Research International, 2017*. https://doi.org/10.1155/2017/1789084

Gillis, A., & Jackson, W. (2002). *Research for nurses: Methods and interpretation*. FA Davis Company.

Heim, A. B., & Holt, E. A. (2021). Describing Informal Learning Experiences among College-Age Adults. *Journal of STEM Outreach, 4*(1). https://doi.org/10.15695/jstem/v4i1.04

Jewitt, C. (2008). Multimodality and literacy in school classroom. *Review of Research in Education, 32*, 241–267. https://doi.org/10.3102/0091732X07310586

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential and inquiry-based teaching. *Educational Psychologist, 41*(2), 75–86. https://doi.org/10.1207/s15326985ep4102_1

Kolb, D. (1984). *Experiential Learning: Experience as the source of learning and development*. Prentice Hall.

Kress, G., & van Leeuwen, T. (2001). *Multimodal Discourse: The Modes and media of Contemporary Communication*. Arnold.

Kumar, D., & Lata, P. (2020). Teachers' Perceptions about the Existing CBSE Secondary Grade English Syllabus and the Need for Inclusion of Multimodality. *Universal Journal of Educational Research, 8*(12A), 7870–7880. https://doi.org/10.13189/ujer.2020.082576

Lamborn, S., Newmann, F., & Wehlage, G. (1992). The significance and sources of student engagement. *Student Engagement and Achievement in American Secondary Schools*, 11–39.

Mok, J. (2015). A Multimodal Framework for Teaching and Learning: Case Study of a Japanese University Context. *Conference Proceedings. The Future of Education*, 368.

Moon, J. A. (2004). *A Handbook of Reflective and Experiential Learning: Theory and Practice*. Routledge.

Norris, S. (2014). Multimodal Interaction. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics*. Wiley.

Papert, S. (1980). *Mindstorms: Children, computers, and powerful ideas*. Basic Books Inc.

Piaget, J. (1923). *Language and thought of the child*. Delachaux & Nestle.

Ryoo, J., & Winkelmann, K. (2021). *Innovative learning environments in STEM higher education: Opportunities, challenges, and looking forward*. https://doi.org/10.13189/ujer.2020.082576

Trowler, V. (2010). Student engagement literature review. *The Higher Education Academy*, *11*(1), 1–15.

Vygotsky, L., & Cole, M. (2018). *Lev Vygotsky: Learning and social constructivism. Learning Theories for Early Years Practice*. SAGE.

Wyatt-Smith, C., & Kimber, K. (2009). Working Multimodally: Challenges for Assessment. *English Teaching: Practice and Critique*, *8*(3), 70–90.

Appendix

Appendix A: Cross Cultural Skill Course Assignment Guidelines given to the students

Special Project Assignment: Cross Cultural Skills

MM: 50

Dead line: DD/MM/YYYY

Note: For this assignment choose **either of the following** and submit according to the given guidelines. Also in case of **plagiarism** you will be awarded zero.

Paper: You choose your own question in relation to the cultures we have studied so far and then write a short, analytical paper. You must begin with a question, issue, theme or problem which your chosen cultures (at least two) bring out for you. Then frame an appropriate title of your paper.

The seed of your paper is in the prompt you write for yourself in the form of a question that any of the cultures we have studied (or any aspect of cultures) poses for you. I'd like you to arrive at your question on your own. But please make sure that your question, issue or problem isn't too general. For instance, you cannot write about monochronic vs polychronic. But you can write about the failure of some specific Foreign acquisition in India. You should articulate your question as clearly as possible and then begin writing drawing upon a close understanding of two or more than two cultures.

You should then come up with a thesis statement which summarizes your argument about the question, theme or issue you grapple with in your paper. It may be so that you arrive at a thesis statement only at the end of the paper. You should then rewrite the paper beginning with the thesis statement and structure your evidence accordingly in order to support the argument.

You should just choose one question or problem related to cultural studies because you won't be able to address anything else in such a short paper. All your claims about the cultures should be supported by evidence or case studies (using proper citation methods). Your paper must not exceed **2000 words**. You should have at least 4 references in your paper.

or

Creative project: 'Creative project' is flexible in nature. You can do a film, video, audio, photography or a creative writing project. The fundamental requirement is that the creative project should relate to the themes of the course—at least two cultures that we have studied. It cannot be too general. For instance, you cannot just string together a few photographs titled *Alienation*. The creative project should reflect a thoughtful engagement with at least two cultures. In fact, you should pose a question in relation to any culture(at least two) for your creative project, and attempt to explore it through the form you chose. Follow the guidelines for the academic paper to ascertain a sense of how we want you to rigorously engage with the project.
You will have to submit a **500 word** document which describes your project, the questions raised from the cultures you have chosen as well as gives us a sense of the creative process which culminated in your final submission. You can discuss your creative projects with me once before you commence with the idea in order to have clarity how effectively you would use multiple modes.

Deadline: DD/MM/YYYY, Time. The academic paper assignments should be emailed on the official email. If you're submitting your creative projects in physical copy, then you should send in your **500 word write up** on the email as per the deadline, and you can hand us physical assignments after class on DD Month.

Only Word files to be submitted, saved as: **TermPaper_FirstName_LastName. ID** or **Creative Project_FirstName_LastName.ID**

No further extensions shall be granted.

Appendix B: Examples of Multimodal Creative Projects submitted by some of the students

Note: For the Creative Project Outcomes given below, permission has been taken from the concerned students.

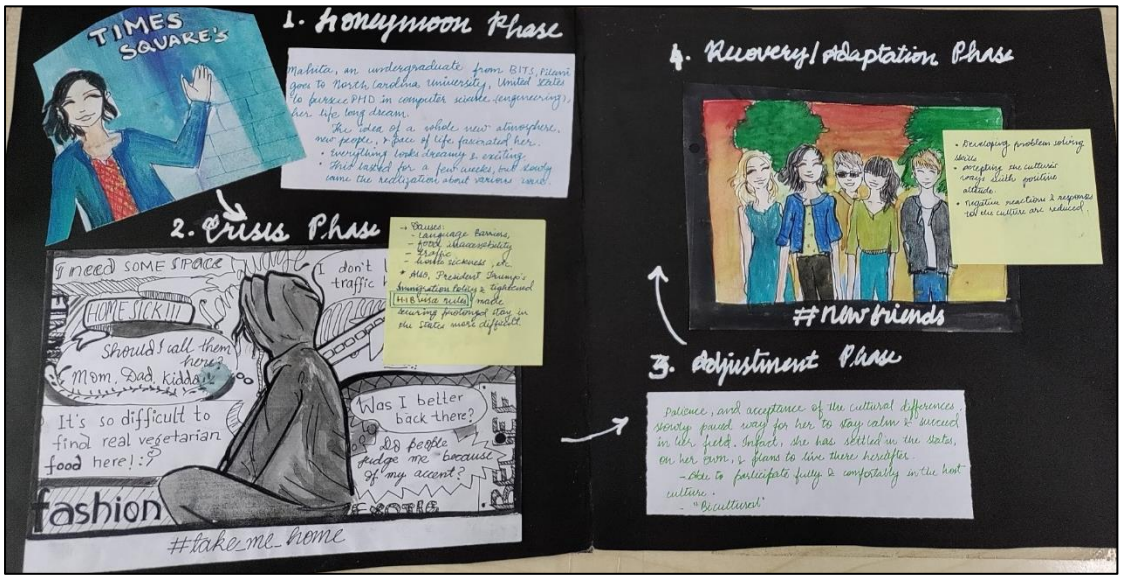


Figure 4. Collage prepared by one of the students from Creative Project group

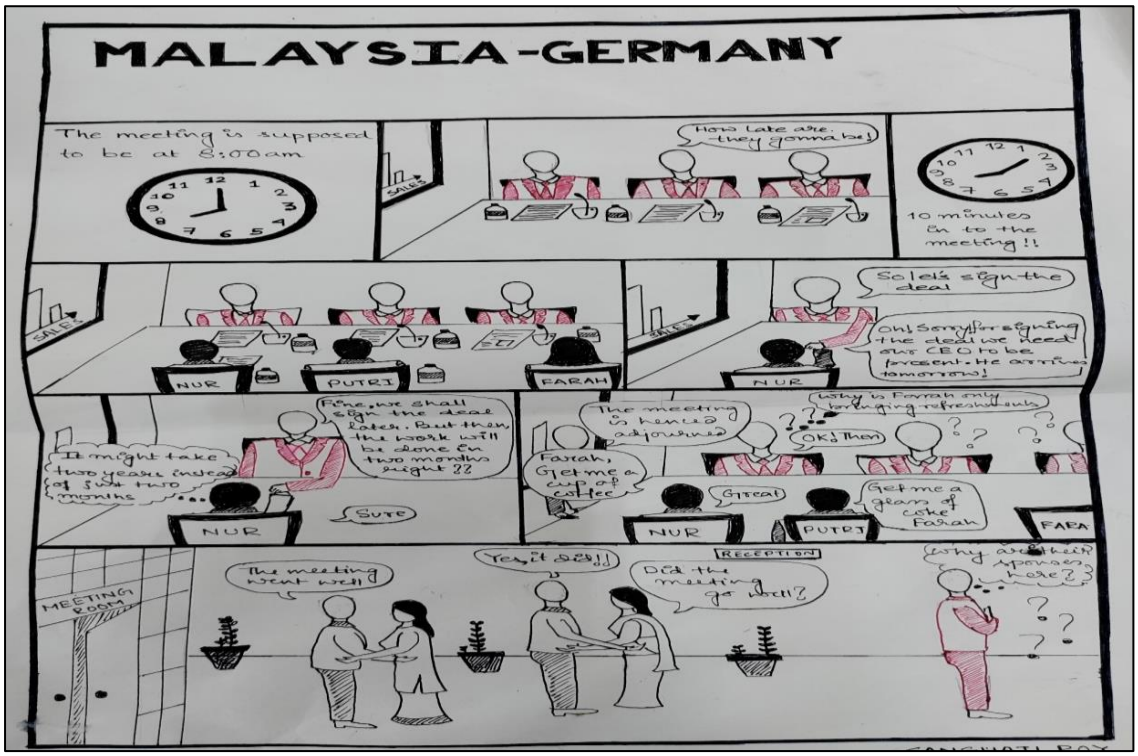
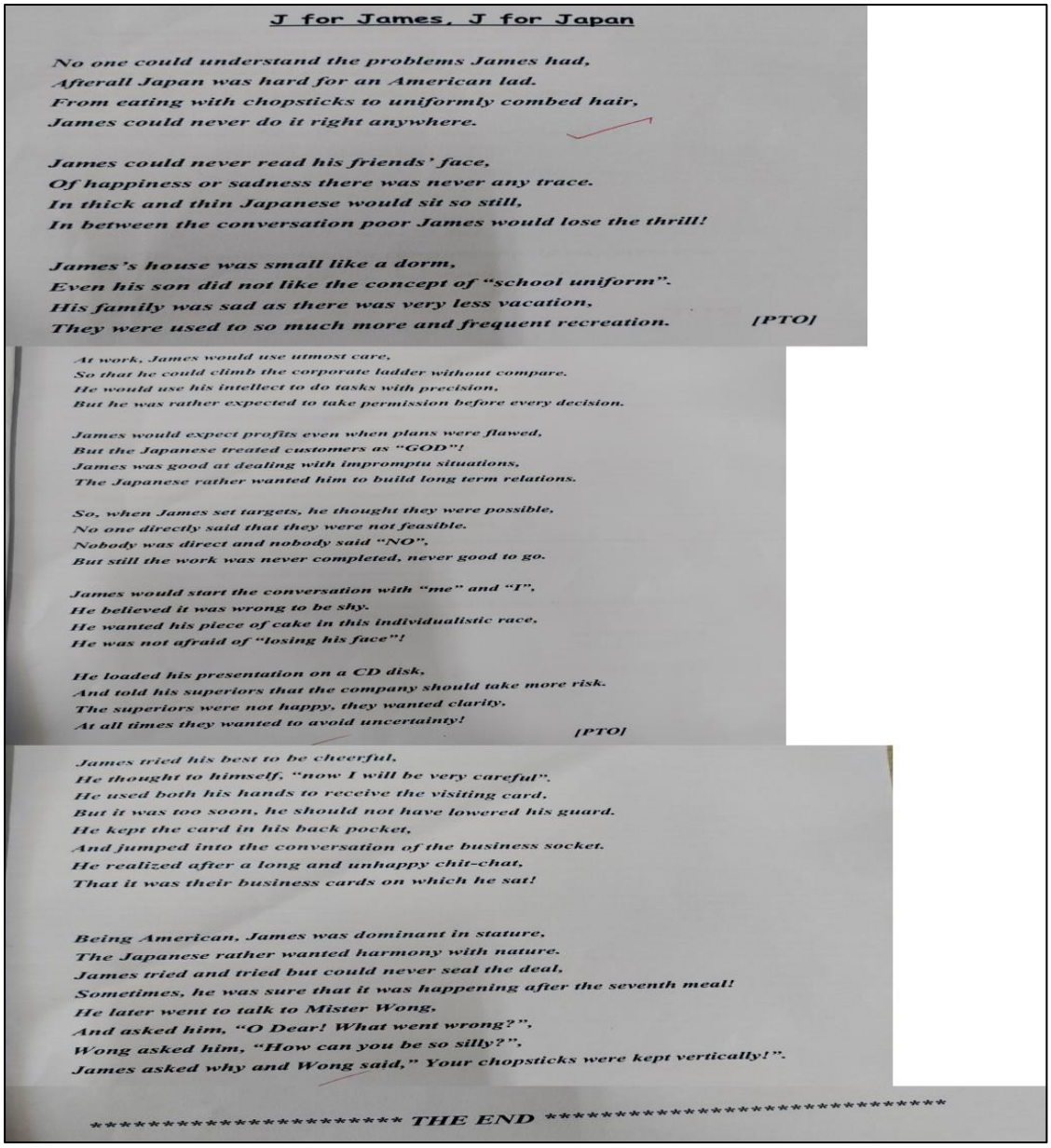


Figure 5. Comic Strip prepared by one of the students from Creative Project group



J for James, J for Japan

No one could understand the problems James had,
Afterall Japan was hard for an American lad.
From eating with chopsticks to uniformly combed hair,
James could never do it right anywhere.

James could never read his friends' face,
Of happiness or sadness there was never any trace.
In thick and thin Japanese would sit so still,
In between the conversation poor James would lose the thrill!

James's house was small like a dorm,
Even his son did not like the concept of "school uniform".
His family was sad as there was very less vacation,
They were used to so much more and frequent recreation. [PTO]

At work, James would use utmost care,
So that he could climb the corporate ladder without compare.
He would use his intellect to do tasks with precision,
But he was rather expected to take permission before every decision.

James would expect profits even when plans were flawed,
But the Japanese treated customers as "GOD"!
James was good at dealing with impromptu situations,
The Japanese rather wanted him to build long term relations.

So, when James set targets, he thought they were possible,
No one directly said that they were not feasible.
Nobody was direct and nobody said "NO",
But still the work was never completed, never good to go.

James would start the conversation with "me" and "I",
He believed it was wrong to be shy.
He wanted his piece of cake in this individualistic race,
He was not afraid of "losing his face"!

He loaded his presentation on a CD disk,
And told his superiors that the company should take more risk.
The superiors were not happy, they wanted clarity,
At all times they wanted to avoid uncertainty!
[PTO]

James tried his best to be cheerful,
He thought to himself, "now I will be very careful",
He used both his hands to receive the visiting card,
But it was too soon, he should not have lowered his guard.
He kept the card in his back pocket,
And jumped into the conversation of the business socket.
He realized after a long and unhappy chit-chat,
That it was their business cards on which he sat!

Being American, James was dominant in stature,
The Japanese rather wanted harmony with nature.
James tried and tried but could never seal the deal,
Sometimes, he was sure that it was happening after the seventh meal!
He later went to talk to Mister Wong,
And asked him, "O Dear! What went wrong?",
Wong asked him, "How can you be so silly?",
James asked why and Wong said," Your chopsticks were kept vertically!".

********** THE END **********

Figure 6. Poem written by one of the students from Creative Project group