

## **1. Background scenario of the study**

Human progress is highly depending upon education, his triumph over too idealized circularity in the logic of empowered self awareness and thriving in managerial setting with warranted creative identity which focuses on promoting innovative capabilities in learners. Innovative change is the omnipresent characteristic of the emerging knowledge society and this channelize innate potentials to cope up with the needs, to compact the challenges and pave the way for imagination, inquisitiveness and consequent transformation in accordance with changed global grounding. In this competitive global scenario, the task of education is not only to edify people with the knowledge or transmit some quantum of information to students; but to nurture diverse imagination moves, techno pedagogical skills, information communication skills, create adjustment mechanisms, desirable attitudes, skills and competencies for developing opportunities to design, plan, prepare and implement structured advancements and visionary trends insightfully in business endeavors to capacitate learners to participate in the changed global milieu. To equip themselves in the drastically changing knowledge economy a new method of changing curriculum transaction modes in the orbital of macro genre and pedagogical discourses have to be adopted at higher secondary school level. Within the social family models of teaching, the investigator considers Jurisprudential inquiry model (JIM) relevant for commerce education, as it is embed with issues related to the corporate world which includes conflicting values, interest and priorities and structuring learning opportunities. Students of commerce need to be trained in schools to analyze contextual business issues, identifying values and value conflicts, position articulation, defending rationally stating arguments and evaluating and testing the consequences of stance while examining business case scenarios that determines the initiation, pacing, sequencing and evaluation of the overall pedagogic activity. Thus JIM emphasizes on transforming information into knowledge, strengthen higher order thinking skills, master conceptual knowledge promoting cognitive development, and become independent learners by observing the task ahead to be empowered with social skills and competencies in an entrepreneurial mindset.

## **2. Need and significance of the study**

Real learning is the interplay between experience, discourses, reflection, judgment and action. An effective commerce curriculum transaction process enable student to realize the social issues confronted through reflective observations and sharpens the 21<sup>st</sup> century skills and related competencies mandated by the dynamic business world. In this context the investigator felts JIM opens up boulevard for learner to examine business ambience in the corporate world. Adoption of select models of teaching enable teachers to deal with the challenging atmosphere of the classroom and JIM is a powerful curriculum transaction instrument which capacitate students in reflectively analyzing social issues through the provisions of the phased programme offers pedagogical platform for dialogic exchanges, stimulate critical thinking on social issues, lift up visionary trends, facilitates learner to acquire position taking skills deal with conflicts, develop decision making skills, improves communicative and interpersonal skills. There exists a skills gap in the knowledge at issue in the curriculum exemplication of teaching commerce among higher secondary school students. The learners in commerce education need to be trained in schools by giving practical experience to analyze contextual business issues, identifying values and value conflicts, position articulation, defending rationally stating arguments and evaluating and testing the consequences of stance while examining business case scenarios from the corporate sector in systematic and creative ways. The prevailing instructional approaches and strategies are inadequate to nurture the core outcome of commerce such as creative and critical thinking skills, problem solving and decision making skills, interpersonal skills, communication skills, conflict management skills, entrepreneurial skills and social competencies demanded by the dynamic business world. The investigator being a commerce teacher educator, felt the need for developing suitable instructional pattern towards its unique dimensionalities with due focuses on academic performance, entrepreneurial skills and social competence. It is noted that there is acute dearth of studies reported in the commerce discipline especially associated with models of teaching for effective pedagogical transaction especially in the school set up. In this context, the investigator selected JIM belonging to social family models of teaching based on the theoretical supports and research findings of prior studies Tiwari (1992), Nelson *et.al* (2007), Byfford&Russel (2006), Jalaja

(2006), McDonald( 2007), Nwaforc (2014) highlighted that JIM acts as an effectual instructional model to realize the core outcomes of commerce education. The ensuing research queries were formed on the basis of the study:

- 1) Is there exists any constrictions and challenges in the prevailing instructional practices of commerce at Higher Secondary School level?
- 2) Can the select instructional model be effectual enough to accomplish the outcomes of commerce at Higher Secondary School level?
- 3) How can higher secondary commerce students be encouraged to explore business issues vigorously and embark upon learning scenario with confidence through the interface with JIM?
- 4) How does JIM act as an influential model for intertwining concepts in commerce, entrepreneurial skills and social competence in creating meaningful learning set by analyzing business oriented corporate issues?
- 5) How can the select model enhance academic performance, entrepreneurial skills and social competencies of commerce students at Higher Secondary School level?

### **3. Statement of the problem**

In the experiential space the investigator tries to examine the practicability of implementing JIM through the study entitled “Effectiveness of Jurisprudential Inquiry Model on academic performance, entrepreneurial skills and social competence among commerce students at higher secondary level”

### **4. Objectives of the study**

- 1) To analyze the predominant pedagogical functions for transacting commerce curriculum at Higher Secondary school level in upbringing academic performance, entrepreneurial skills and social competence.
- 2) To formulate lesson design based on select Jurisprudential Inquiry Model for developing academic performance, entrepreneurial skills and social competence among commerce students at Higher Secondary school level.

- 3) To test the effectiveness of Jurisprudential Inquiry Model in enhancing the academic performance among commerce students at Higher Secondary school level.
- 4) To test the effectiveness of Jurisprudential Inquiry model in enhancing entrepreneurial skills among commerce students at Higher Secondary school level.
- 5) To test the effectiveness of Jurisprudential Inquiry model in enhancing social competence among commerce students at Higher Secondary school level.
- 6) To compare the effect of select Jurisprudential Inquiry model among subgroups of pupil at Higher Secondary school level based on gender, locale and type of higher secondary school with regard to academic performance, entrepreneurial skills and social competence.
- 7) To analyze how the select Jurisprudential Inquiry model is effective in heightening entrepreneurial mindset and social competence in natural setting at Higher Secondary school level

## **5. Hypotheses of the study**

The hypotheses formulated for the purpose of the study are as follows:

- 1) The predominant pedagogical functions for transacting commerce curriculum at higher secondary school level are inadequate in upbringing academic performance, entrepreneurial skills and social competence.
- 2) JIM is effective in improving academic performance, entrepreneurial skills and social competence compared to activity oriented approach for the total sample.
- 3) There exists significant difference in pretest, first post test and second post test scores between experimental group and control group.
- 4) There exists significant difference in the scores of academic performance, entrepreneurial skills and social competence before and after intervention

for the total sample and also among different subsample based on gender, locality and type of higher secondary school.

- 5) There exists significant difference in the effectiveness of JIM in terms of academic performance, entrepreneurial skills and social competence among boys and girls.
- 6) There exists significant difference in the effectiveness of JIM in terms of academic performance, entrepreneurial skills and social competence among rural and urban students.
- 7) There exists significant difference in the effectiveness of JIM in terms of academic performance, entrepreneurial skills and social competence among HSS and VHSS students.
- 8) There exists significant interaction between gender, locality and type of higher secondary school in the effectiveness of JIM in terms of academic performance, entrepreneurial skills and social competence.

## **6 Methodology for research**

The present study is endeavored to capacitate the student band at higher secondary level with a view of developing academic performance, entrepreneurial skills and social competence using Jurisprudential inquiry model. In line with the objectives of the study, mixed methodology coalescing both quantitative and qualitative approaches is used. The investigator selected Pre-test Post-test non equivalent group design for the quantitative part. The study was conducted in three phases viz; Primal, Experimental and Terminal phase. At the incipience of the study, the investigator used simple descriptive survey to assess regnant classroom practices at Higher Secondary level by means of an interview protocol among select practitioners and experts (N=78), for the experimental phase sample consisted of 389 students in higher secondary level from two districts in Kerala and in the terminal phase, three strata's of pupils from experimental groups were taken as sample of the study for episodic interview which forms the qualitative aspect of the study.

## **6.1 Variables of the study**

The independent variable were Prevailing activity oriented approach, Jurisprudential Inquiry Model of teaching and dependent variables were Academic performance, Entrepreneurial skills and Social competence.

## **6.2 Exploratory supports and techniques of the study**

The exploratory supports and techniques employed for the present study were Interview protocol, Assessment schedule for validating the instructional model, Achievement test in commerce, Entrepreneurial skill assessment scale, Social competence assessment test, Lesson design based on JIM and Activity oriented approach, Instructional model judgment proforma and Episodic interview guide

## **6.3 Statistical procedures employed**

Appropriate statistical procedures such as Repeated measures ANOVA, Independent t-test, Paired t-test, Three way Factorial ANCOVA, percentage computations were employed for analysis of data

## **7. Major findings of the study**

The findings that burgeoned from the analysis of the data leads to absolute answers to research questions outlined by the investigator is portrayed under fragment I and II

### **7.1 Fragment I of themes**

*This segment depicts findings and conclusions based on assessment of opinions of the select experts in commerce and practitioners regarding the regnant pedagogical transaction ways of learning commerce using interview protocol, focusing on theoretical constructs and praxis, obstructions and challenges along with designing supplements for chiseling conceptualization of academic performance, entrepreneurial skills and social competence among students at higher secondary school level.*

The analysis of this section emanates the following findings.

The prevailing teaching learning processes are insufficient in edifying the innate potentials of learners and hence potent instructional mechanism to craft an

urge for development of entrepreneurial skills and social competence in the interactive learning space were required. Novel learning modes to swamp the restraints confronted in the prevailing commerce transaction modes are essential to expedite commerce learning scenario and alternate instructional dimensionalities which confer the practitioners for thriving illumination of aims and objectives of commerce curriculum were found out.

## **7.2 Fragment II of themes**

*The findings and conclusions emerged while analyzing the test scores obtained through the administration of Jurisprudential inquiry model on academic performance, entrepreneurial skills and social competence amongst commerce students at higher secondary level focusing on Achievement test, Entrepreneurial skills assessment scale, Social competence assessment test, instructional model judgment proforma, and the executing of episodic interview are detailed as follows.*

- ✓ Comparison of pre-test scores with two post test scores of *academic performance* was done with repeated measures two way ANOVA show that there exists significant interaction effect of between measurement and group which indicates that the variation in different levels of measurement was not same in the case of control and experimental group.
- ✓ Paired t-test results shows that there exists significant difference between pre and first post test scores, pre and second post test scores and first and second post test scores for both control and experimental group. Percentage increase from pre to post test scores was high for experimental group and percentage reduction from first post test to second post test scores was less in the case of experimental group. This shows that JIM model is more effective in improving academic performance compared to AOM for the total sample.
- ✓ Comparison of each test scores among control and experimental groups done by using independent t-test also reveals that experimental group has significantly higher means for three variables compared to control group which is an indication of higher improvement in the case of the group exposed to JIM.

- ✓ Analysis using paired t-test for comparing pre test scores with first post test , pre test with second post test scores and first post test with second post test scores among the sub sample of boys, girls, rural, urban, HSS and VHSS shows that there exists significant difference between all the pairs both in the case of control and experimental group except in the case of pre test and second post test in the case of control group of urban students which shows retention capacity was less in the case of control group.
- ✓ Analysis of covariance using first post test scores shows that there is no significant difference in the effectiveness in terms of academic performance among, boys and girls, rural and urban students and also among HSS and VHSS students. All the interaction studied were also found to be non significant. This shows that the effectiveness of JIM model is same among the entire sub sample considered in the study.
- ✓ Three way ANCOVA using second post test scores shows that there exists no significant difference in the effectiveness in terms of academic performance among, boys and girls and rural and urban students. The effect due to type of school and also the interaction between locality and type of school was found to be significant. A decrease in the mean scores of students in the VHSS compared to HSS in rural area and increase was noted in the VHSS compared to HSS in urban sub sample. This results show that there exists variation in the effectiveness in the retention capacity of JIM among the students of HSS and VHSS and it depends on the type of locality.
- Comparison of pre-test scores with two post test scores of *entrepreneurial skills* done with repeated measures two way ANOVA shows that there exists significant interaction effect of between measurement and group which indicates that the variation in different levels of measurement was not same in the case of control and experimental group.
- Comparison of mean values shows that both in the control group and experimental group there is an increase was noted from pre test to first post test. In second post test an increase was noted in the case of experimental but a reduction was noted in the case of control group.

- Paired t-test results shows significant difference between pre and first post test scores, pre and second post test and first and second post test scores for both control and experimental group. Percentage increase from pre test scores to post test scores was high in the case of experimental group. There is a significant reduction from first post test scores to second post test scores in the control group and significant increase in the case of experimental groups. This shows that JIM model is more effective in improving entrepreneurial skills compared to AOM for the total sample.
- Paired t-test for comparing pre test with first post test, pre test with second post test and first post test with second post test scores among the sub sample of boys, girls, rural, urban, HSS and VHSS shows that there exists significant difference between all the pairs both in the case of control and experimental group. Significant reduction was noted in the second post test scores in control group compared to first post test scores. However in the case of experimental group there is significant improvement was noted from first post test to second post tests which indicates the effectiveness of JIM.
- Three way ANCOVA using first post test scores shows that there is no significant difference in the effectiveness in terms of entrepreneurial skills among, boys and girls and also rural and urban students. Yet the effect due to type school was found to be significant indicating significant difference in the effectiveness of JIM among HSS and VHSS students. But no interaction was found to be significant. Comparison of mean scores shows that HSS students have higher mean score compared to VHSS students reveals that effectiveness JIM is more in the case of HSS students compared to VHSS students.
- Results of three way ANCOVA using second post test scores revealed that the effect due to locality and type of school was found to be significant. Higher mean scores in the case of urban students shows that JIM is more effective for urban students compared to rural students. Similarly higher mean score of HSS students is an indication of effectiveness among the HSS students in the improvement of entrepreneurial skills.

- ❖ Comparison of pre-test scores with two post test scores of *social competence* was done with repeated measures two way ANOVA show that there exists significant interaction effect of between measurement and group which indicates that the variation in different levels of measurement was not same in the case of control and experimental group. Gradual increase was noted from pre test to first test and then to second post test in the case of experimental group whereas in the case of reduction was noted in the case of control group.
- ❖ A separate analysis of pre and post test scores for each group shows that there exists significant difference between pre and first post test scores, pre and second post test scores and first and second post test scores for experimental group.
- ❖ In the case of control group no significant difference was noted between pre test score and first post test scores. A significant reduction was noted in the control group from first post test to second post test were as a significant increase was noted from first to second post test in the experimental group. This shows that JIM model is more effective in improving social competence compared to AOM for the total sample.
- ❖ Analysis using paired t-test for comparing pre test scores with first post test, pre test with second post test scores and first post test with second post test scores among the sub sample of boys, girls, rural, urban, HSS and VHSS shows that there exists significant increase in all the pairs in the case of experimental group.
- ❖ In the subsample of boys in control group, a significant reduction was noted from pre test of first post test and then to second post test. For girls no significant improvement was noted from pre to first post test and a significant reduction was noted from first post test to second post test scores.
- ❖ In the case of sub samples of rural and urban students no significant improvement was noted between pre test to first post test and a significant reduction was noted from first post test to second post test scores in the case of control group.

- ❖ In the case of sub sample of HSS students in the control group no significant differences was noted between pre test, first post test and second post test scores. However in the case of VHSS students in the control groups shows a significant reduction.
- ❖ ANCOVA using first post test scores shows that there is no significant difference in the effectiveness in terms of social competence among, boys and girl, rural and urban students and also HSS and VHSS students. All the interactions are significant. ANCOVA results using second post test scores revealed that the effect due to locality and the interaction between locality and type of school was found to be significant indicating significant difference in the effect of JIM among rural and urban students and also it depends on the type of school in which the students studying. Comparison of mean scores reveals that for HSS students significant reduction was observed in rural locale and increase in urban locale.

**The intensified effect of the select Jurisprudential inquiry model in the experiential space among the identified bands of pupils through episodic interview revealed the following outcomes.**

The findings from episodic interview lead to the conclusion that contextualized problem scenarios from corporate world hooked the students into learning which set the stage for exploring and analyzing issues; identification of issues, position articulation, exploring stance, testing and evaluation of qualified position, and thereby make sense of the business world. Learners commended that JIM, provided innumerable exposure and interactions with knowledge in diverse contexts which are likely to promote transfer of ideas to novel situations than simply memorizing information to make learning meaningful leading to academic excellence. This model synergizes a specific way of integrating societal issues and corporate issues to the instructive content which equips the learner to involve positively in their respective task groups collaboratively, which created a positive outlook towards problem solving, decision making, creative thinking, making ethical judgments, evaluating consequences of the decisions, competence to convey ideas, manage conflicts and knowing how to learn by adopting a multidisciplinary approach. JIM provide

avenues to think in an extensive fashion, prompted to pose inquiries and motivated to apply entrepreneurial know how and skills such as innovativeness, creativity, pro-activeness, problem solving and decision making and opened new road maps to territories by taking into consideration process driven pedagogy with an open learning process enhancing student's higher order thinking yielding a rich forum for productive discussions, promoted deep understanding of business issues, meaningful exchanges which hone communication and interpersonal skills. Based on the above findings of the study the select instructional model namely Jurisprudential Inquiry Model of teaching enlivens the realization of cardinal entrepreneurial competencies within learners to become active participants by capacitating them to deal with contextualized problem scenarios from corporate sector which generates disequilibrium in participants thinking and augment their academic performance, entrepreneurial skills and social competence.

## **8 Implications of the Study**

The findings of the present study have the ensuing implications:

- 1) The study on the prioritized aspects of vivid dimensionalities through interview protocol regarding initial awareness of entrepreneurial skills and social competence of student's revealed that most of the students are emotionally immature to analyze the problems associated with handling of contextual corporate situations. Prevailing modes of curriculum transaction in commerce education are insufficient enough to equip students in entrepreneurial skills conceptualization. Hence the investigator felt the need for opting appropriate models of teaching and accordingly JIM was selected for the study. The involvement with JIM provide opportunities for students to take part in interactive sessions, capacity building activities, skill in handling and managing conflicting situations, maintaining social relation and necessitate encompassing the aspects of entrepreneurial skills and social competencies
- 2) The changed global scenario demands the need to develop entrepreneurship skills and social competencies to properly train and educate learners in accordance with the requirements of the business enterprise. For this purpose, educational institutions should be given practical support and incentives to

chisel out entrepreneurship skills and social competencies in the instructional practices through a range of pedagogical scaffolds and promotion of partnerships with business concerns. Programmes on entrepreneurial skills and social competence provide impetus for change by creating learning pathways with the support of instructional strategies to students at higher secondary level that fortifies professional excellence at all facets.

- 3) In the 21<sup>st</sup> century, commerce education has a momentous role to play to integrate theory with practice. Apart from content knowledge, professional skills and competencies in tune with the nature of commerce discipline have to be structured and developed for enhancing initiatives, self confidence and to act in socially responsible and competent way which is useful in both personal and social aspects of life.
- 4) Authorities should introduce JIM at school level to make learners innovative, creative, and entrepreneurial in their education process. Transacting commerce subject from entrepreneurial view point using innovative strategies would in turn craft a positive future to cope up with the 21<sup>st</sup> century skills.
- 5) The curriculum should embrace academic programmes that are pragmatic and industry oriented and must be developed as for the present and future needs, job opportunities and aspirations, the syllabi must be restructured to adopt the latest theoretical and contextual corporate realities, educational enterprise and industry intersay to prepare the learners. Therefore it is high time for all the concerned authorities including government, curriculum developers, teachers and parents to think on ways to enhance the social competence of children from an entrepreneurial mindset using instructive practices to attain the core outcomes of commerce education.
- 6) As a pedagogical instructional device JIM develop initiatives in the students through critical dialogue and facilitated critical thinking skills, constructive dialogic exchanges, stimulated shifts in individual perspectives augmenting entrepreneurial skills and social competence of commerce students. The present investigation is an eye opener to accomplish vibrancy in the gamut of social information processing skills with the support of JIM that heightens

creative analysis and exploration of issues, stimulate reflective actions and constructive judgments that empowers with new internalization which will abet a research aptitude amid the future world.

The experimental results clearly indicate JIM paves opportunities to augment their academic performance, social competencies and entrepreneurial skills in terms of arming students with the skills and knowledge. The outcome of this investigation may affirm the need to conscientize practitioners and prospective teachers in commerce at higher secondary and vocational higher secondary level to incorporate the spirit of building and sustaining academic performance, entrepreneurial skills and social competencies with the effect of instructional model JIM. The unification of allied disciplines and effective integrative modes of transaction will be helpful to explore the ways of liberating the school teaching-learning process to dynamic experiential mode. The contemporary course contents in business management, entrepreneurship education should be embraced with the HSS commerce curriculum to bring learning closer to realistic business world and social issues.

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