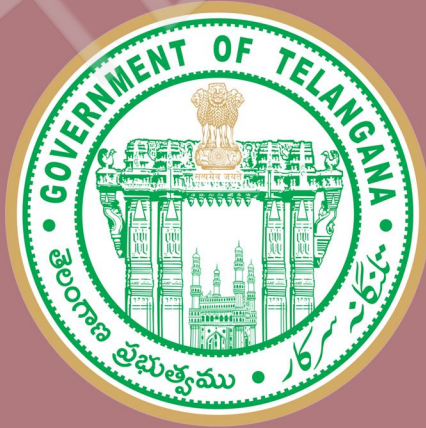# State Curriculum Framework-2011

Position Paper
on
Work Education

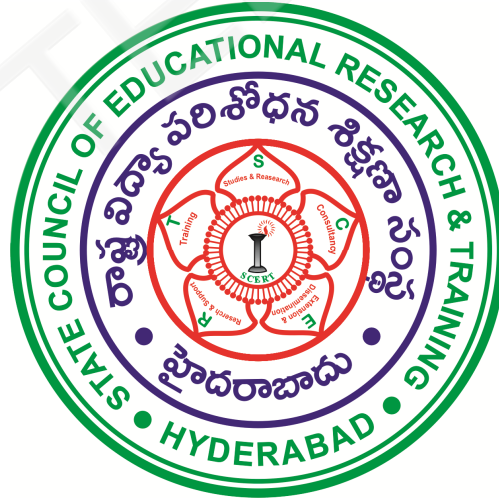**School Education Department**
Telangana, Hyderabad.

State Council of Educational Research & Training,
Telangana, Hyderabad.

State Curriculum Framework-2011

Position Paper

on

Work Education

State Council of Educational Research & Training, Telangana, Hyderabad.

Vision of the State

The vision of the State is that ALL children should receive high quality education and become responsible citizens with an acute sense of the other. They should be aware of their environment and think about it critically. They should listen carefully and speak fearlessly. They should be able to understand what they hear and read; but they should also be able to question it. Teachers should promote these skills, provide meaningful teaching learning processes in natural and friendly environment that enable children to express themselves freely and ask questions. Teachers are collaborative learners and reflective practitioners. Parents and community should have a sense of ownership and participate in the life of the school. In a world which is becoming increasingly instrumental, materialistic and competitive, school should become a space for reflection, cooperation and promotion of human and ethical values.

CONTENTS

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Executive Summary

Work at home and in their parent's fields, shops and various other spaces is a natural part of a child's daily routine in Indian society. It would indeed be a rare situation, if you were to go into a rural household and the child at home was not helping in some domestic chores, or farming activities especially during peak seasons, or making pots, baskets etc with her parents. This work, as distinguished from wage and other forms of exploitative labour, is a source of multi-dimensional learning for the child- cognitive, social, affective and physical and an invaluable resource for the teaching-learning process.

Most schooling experience however not only ignores this source of experiential learning but also denigrates it as being inferior and thus alienates a child from it. A parent lamenting that his son refuses to work in the field after finishing school or another one not even expecting that his educated son would do such a thing, are common occurrences in the rural countryside.

Rooted in the Brahmanical organisation of society where those who work with their hands and produce wealth are denied access to formal education while those who have access to formal education not only denigrate productive manual work but also lack the necessary skills for the same (Position paper, NCF, 2005) schools today continue to accentuate the divide between work and knowledge. Schools also carry a similar legacy of colonial education where the disjuncture between the 'valid' textbook knowledge provided at school and the learning inherent in productive work and its social ethos are accentuated. In turn, the forces of globalization continue to privilege the position of the white-collared, urban, middle classes and elite. Thus, over a period of time and through systematic practice, such a notion of education has come to be rooted in the school system, representing the dominant classes / castes / cultures / languages with gender playing a hegemonic role in each of these categories. The education system has tended to 'certify' this form of knowledge as being the only 'valid' form. In the process, the knowledge inherent among the vast productive forces in the country along with its related values and skills has been excluded from the school curriculum.

Why should work be made a part of the curriculum?

1.   Work gives space to the social and economic realities of most Indian children in school. it helps children in connecting their school learning to their contexts making it meaningful.

2.   Children are curious by nature and also enjoy working with their hands. They want to understand the processes that underpin the various products they use.

3. Making work a part of the curriculum helps in bridging the gap between the 'productive' and the 'schooled' groups of society.

4. Work situations have immense potential for acquiring various competencies- cognitive, social and affective. The learning in such environments is both, *hands-on* and *minds-on*.

The role for work in the school curriculum

The school timetable for classes 3 to 10 needs to make space for exposing children to various types of work and for realizing its pedagogic potential. This position paper describes the pedagogic potential of work in terms of the following competencies-

Cognitive competencies- The word cognition is defined as both 'the mental processes of knowing which include perception, reasoning and intuition as well as 'that what comes to be known or knowledge'. The set of competencies include-

- Planning for work

- Being organised and orderly in activities

- Prioritizing activities

- Use of appropriate tools and materials

- Workmanship and skill in the performance of work

- Planning for new products/ innovating/ creativity

Social competencies- As the word 'social' suggests these competencies include those which facilitate communication and interaction with others.

- Cooperation- to be able to work constructively in a group, sharing and helping others and in turn asking for help where required.

- Listening

- Following directions

- Taking turns

- Being open to different points of view

- Clearly communicating with others

- Respecting other co-workers

Affective competencies- The word affective is defined as 'influenced or resulting from emotions'. Affective competencies thus refers to a set of competencies

which determine her strength of character and are influenced by her ability manage her emotions.

- Persistence and self-discipline – the ability to carry on in difficult situations
- Patience
- Open to new experiences/ curious
- Positive attitude
- Empathy – respecting and giving space to differences in others' world views
- Neatness and cleanliness in work; care of tools and leaving them in proper place after work
- Appreciating diversity – valuing differences both in nature and society
- Valuing nature – seeking to understand and harmonize one's actions with nature
- Valuing manual labour and those who earn their living through it

Guidelines for making work a part of school curriculum

1. Work refers to any productive manual work which reflects the local trades and traditions like agriculture, fishing, food processing, carpentry, tailoring, pottery etc. It does not need to be technology driven; the important thing being that it must be a part of the socio-economic relations that the child is either involved in or witnesses.

2. The choice of work will be depend upon the age of children. Children in upper primary classes can be given work which requires higher motor dexterity in comparison to children from primary classes.

3. The choice of work will depend upon the material resources that the teacher can garner from within the school , as well as the community.

4. The choice of work need not depend upon whether it is connected to a topic of a curricular area. For e.g. the choice of using food processing for a work based classroom is not dependent on a science topic like preservation of food products, or the choice of tailoring or carpentry need not be dependent on a topic of measurement in Mathematics or a gardening activity on a poem about a garden.

5. The choice of work has no relationship with a vocation that child would choose in his secondary or higher secondary classes or any job that he would take up in her future life.

6. The choice of work is not dependent on whether it is technology driven manual work or not.

7. All children irrespective of their caste, class and gender should take part in the work based class.

8. The teacher should also be involved in the production process and her role should not merely be that of a supervisor or someone who is teaching the work

9. Whenever need be the teacher should ask members of the local community to come into the classroom and teach the trade.

10. Peer education should be encouraged. As far as possible children should be asked to work in groups.

11. The teacher should be clear about the competencies she wants to build in children while conducting the work based class. These competencies would in turn serve as parameters for assessment for the teacher.

1. What is Work and Education? Why do we need it?

Work at home and in their parent's fields, shops and various other spaces is a natural part of a child's daily routine in Indian society. It would indeed be a rare situation, if you were to go into a rural household and the child at home was not helping in some domestic chores, or farming activities especially during peak seasons, or making pots, baskets etc with her parents. This work, as distinguished from wage and other forms of exploitative labour, is a source of multi-dimensional learning for the child-cognitive, social, affective and physical and an invaluable resource for the teaching-learning process.

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Rooted in the Brahmanical organisation of society where those who work with their hands and produce wealth are denied access to formal education while those who have access to formal education not only denigrate productive manual work but also lack the necessary skills for the same (Position paper, NCF, 2005) schools today continue to accentuate the divide between work and knowledge. Schools also carry a similar legacy of colonial education where the disjuncture between the 'valid' textbook knowledge provided at school and the learning inherent in productive work and its social ethos are accentuated. In turn, the forces of globalization continue to privilege the position of the white-collared, urban, middle classes and elite. Thus, over a period of time and through systematic practice, such a notion of education has come to be rooted in the school system, representing the dominant classes / castes / cultures / languages with gender playing a hegemonic role in each of these categories. The education system has tended to 'certify' this form of knowledge as being the only 'valid' form. In the process, the knowledge inherent among the vast productive forces in the country along with its related values and skills has been excluded from the school curriculum.

In the traditions of Pestalozzi, Owen, Tolstoy and Dewey, Gandhi's proposal for Basic Education (*Buniyaadi Shiksha*) challenged this brahminical-cum-colonial paradigm and attempted to make productive manual work the foundation of the entire

schooling experience. In asking for an integration of the head, hand and heart in the teaching-learning processes at school Gandhi states-

> "Our education has got to be revolutionised. The brain
> must be educated through the hand. If I were a poet,
> I could write poetry on the possibilities of the five fingers.
> Why should you think that the mind is everything and
> the hands and feet nothing? Those who do not train their
> hands, who go through the ordinary rut of education,
> lack 'music' in their life. All their faculties are not trained.
> Mere book knowledge does not interest the child so as
> to hold his attention fully. The brain gets weary of mere
> words, and the child's mind begins to wander. The hand
> does the things it ought not to do, the eye sees the things
> it ought not to see, the ear hears the things it ought not
> to hear, and they do not do, see or hear, respectively what
> they ought to. They are not taught to make the right
> choice and so their education often proves their ruin. An
> education which does not teach us to discriminate
> between good and bad, to assimilate the one and eschew
> the other is a misnomer."

> — Mahatma Gandhi
> *Discussion with Teacher Trainees, Harijan, 18 February 1939*

In the Gandhian view, participation in productive work under conditions approximating to real-life situations is pedagogically linked to learning and simultaneously becomes the medium of knowledge acquisition, developing values and skill formation. In addition, engagement with work will help promote multi-dimensional attributes in the cognitive, affective and psycho-motor domains in a holistic manner i.e. by integrating 'head, hand and heart'. Pedagogical experience in using work is thus viewed as an effective and critical developmental tool at different stages of childhood and adolescence and, therefore, of moving towards a secular, egalitarian and democratic society.

This position paper will discuss and emphasise the pedagogic role of work in education, for all children irrespective of their social and economic background.

Historical Perspective

The nationalist movement emphasized two things when it talked about elementary education, one was the universalisation of elementary education and second, a qualitatively different education from the colonial times. In 1906, the Indian National Congress called for 'a system of education, literacy, scientific and technical, suited to the requirements of the country', the essential concern being with regard to the colonial tendency to reinforce fragmentation of society. They thought a system of education which would not promote dichotomy between the work and education and thus challenged the colonial masters.

In the National Education Conference held at Wardha in October.1937, Gandhi gave a shape to national system of education which emerged as alternative educational paradigm.The Conference deliberated upon Gandhiji's proposal of Basic Education (*Buniyadi Shiksha*) which would make productive work a pedagogic basis of learning in schools. Learning in a cooperative mode by viewing schools as communities engaged in production and making schools self-reliant through the income of productive work were amongst the other key features of the original proposal that was viewed as a means of social transformation. We are, however, concerned here mainly with the pedagogic vision of this holistic philosophy of education that came to be later known as the *Nai Talim.* While addressing the Wardha Conference, Mahatma Gandhi stated:

> "What I am going to place before you today is not about
> a vocation that is going to be imparted alongside
> education. Now, I wish to say that whatever is taught
> to children, all of it should be taught necessarily through the
> medium of a trade or a handicraft. You may argue that,
> during the middle age, children were taught only trades
> (crafts) in our country. While I agree with this
> contention, but the proposition of imparting the whole
> of education through the medium of trades (crafts)
> was not considered in those days. A trade (craft) was
> taught only from the standpoint of a trade (craft). We
> aim at developing the intellect also with the aid of a trade or a
> handicraft. . . . . . . Therefore, it is my submission that,
> instead of merely teaching a trade or a handicraft, we

may as well educate the children entirely through them. Look at takli (spindle) itself, for instance. The lesson of this takli will be the first lesson of our students through which they would be able to learn a substantial part of the history of cotton, Lancashire and the British empire. . . . . . . How does this takli work? What is its utility? And what are the strengths that lie within it? Thus the child learns all this in the midst of play. Through this he also acquires some knowledge of mathematics. When he is asked to count the number of cotton threads on takli and he is asked to report how many did he spin, it becomes possible to acquaint him step by step with good deal of mathematical knowledge through this process. And the beauty is that none of this becomes even a slight burden on his mind. The learner does not even become aware that he is learning. While playing around and singing, he keeps on turning his takli and from this itself he learns a great deal."

– Excerpted from the address by Mahatma Gandhi at the Wardha Education Conference, 22 October 1937

[Translated from Hindi, Hindustani Talimi Sangh, 1957, pp. vii-viii]

The idea of work and education has been experimented with through various initiatives all over the world. And while the benefits of the pedagogic role of work in education cannot be denied these experiments have never been adopted as the way in which mainstream education can be taken ahead. The same is true for India.

Both policy and curricular documents in India acknowledge the indelible role of work in education but do not see it as the centre of all curricular activity. The Kothari Commission (1964-1966) states that 'all good and purposeful education should consist of atleast four basic elements:

- 'literacy' or a study of languages, humanities and social sciences;

- 'numeracy' or a study of mathematics and natural sciences;

- Work experience; and

- Social service.'

Work experience

The commission clearly states that 'work- experience is…a method of integrating education and work'. It further states that Work-experience ''can help to make the distinction between intellectual and manual work less marked as also the social stratification based on it. It could make the entry of youth into the world of work and employment easier by enabling them to adjust themselves to it. It could contribute to the increase of national productivity both by helping students to develop insights into productive processes and the use of science, and by generating in them the habit of hard and responsible work. And it might help social and national integration by strengthening the links between the individual and the community and by creating bonds of understanding between the educated persons and the masses."

– Report of the Education Commission (1964-66),
Sections 1.27-1.29

The benefits of integrating work and education that the report lays down- affecting the unequal social structure of society and introducing children to the world of work, hint at the potential for cognitive, social and affective learning for the child in this area. It however does not link curricular areas like Language, Mathematics, Science etc to work.

The report also clearly distinguishes between work experience and vocationalistion of education stating that 'a strong vocational basis should be given to secondary education'. However, the National Policy on Education–1986 is much more concerned with students' 'entry into the workforce' and pre-vocational programmes to "facilitate the choice of the vocational course at the higher secondary stage" than talking about the pedagogic role of work in education. The underlying premise seems to be that work-experience is meant for building the workforce and vocational courses. This confusion is at the root of the widespread tendency to equate vocational education with work-based education and vice-versa.

This concern is being articulated here precisely because the prevailing curricula in various school systems neither reflect Basic Education's vision of a work-centred curriculum nor the Education Commission's conception of work-experience. And, in

popular perception as also in academic discourse, work-experience is often confused with vocational education, something which Gandhiji, as quoted above, warned us about in his address to the Wardha Conference in 1937!

Community Work and Social Action

The Kothari Commission (1964-66) consider social service one of the basic elements for a good and purposeful education and recommended that "some form of social and national service should be made obligatory for all students and should form an integral part of education at all stages (Sections 1.39-1.40)."

The Ishwarbhai Patel Committee Report (1977), while reviewing NCERT's ten-year school curriculum framework (1975), observed that the curriculum should be capable of relating learning "closely to socially productive manual work and the socioeconomic situation of the country" and making it available "in such a way that working and learning can always be combined." Preferring to term "purposive, meaningful, manual work" in the curriculum as Socially Useful Productive Work (SUPW), the Committee observed: "The purpose of demarcating a distinct curricular area as Socially Useful Productive Work is to emphasise the principle that education should be work-centred . . . . The aim of this curricular area is to provide children with opportunities of participating in social and economic activities inside and outside the classroom, enabling them to understand scientific principles and processes involved in different types of work and in the setting in which they are found in the physical and social environment . . . . .[it] must not be confined to the four walls of the school, nor can they be provided by the teacher only. Programmes should, therefore, be so planned and implemented that the local community, community development organisations and governmental agencies participate in them and cooperate with the school."

– Report of the Review Committee on "The Curriculum for the Ten-Year School" (1977), Chapter 3, pp. 10-11.

Thus, while SUPW talked about productive, manual work being used for community work and social service it also did not envision of a work-centered curriculum. Furthermore, as our school system is too structured (timetable, textbooks, examinations) to allow for space for the initiatives thought of, SUPW classes in

schools get reduced to being hobby classes. In fact, the terms Work Experience and SUPW have came to be used interchangeably in schools.

2. Context, Concerns and Issues

This chapter presents the status of work education in Andhra Pradesh as well as the various concerns and issues surrounding it.

The context of Andhra Pradesh

One of the largest states in India, Andhra Pradesh has a population of 8.5 crores. It is divided 23 districts which are spread over Telangana, Rayalaseema and Andhra regions. The prominently spoken language is Telgu and it is home to various castes and religions. According to the 2011 census the literacy rate is 67.7 percent; male literacy (75.6 percent) is however substantially higher than the female literacy (59.7 percent).

The socio-economic survey conducted by MHRD puts the poverty rates of rural and urban Andhra Pradesh for 2004-2005 at 11.2% and 28% respectively. The majority of the work force is engaged in unorganized sector, mostly in agricultural related works, where they do not manage to earn even their minimum wages. At the same time, the percentage of people living below the poverty line is increasing as agricultural employment has declined significantly; pushing the workforce out of agricultural sector however, the manufacturing and service sectors are unable to accommodate them. The state is also cutting down its expenditures on education, health and other social welfare measures in the context of the globalizing market economy and as a result these are becoming unaffordable for the marginalized sections.

The government investment in public education is disappointing for parents. This has seen the mushrooming of a variety of private schools across the state. Parents enroll children in ITI foundation schools, digi schools, international schools or at least a private school of their affordability even before class 10. Nearly 30% children are in private schools and this is higher than the all India statistic of 20 percent. However, even after investing life time savings parents have no guarantee that their child will be able to get a job. this is true for even the much talked about ICT sector "it may be noted that as per a recent study, less than 0.2% of the workforce is engaged in this sector". (NCF-2005, WE P. No. 11) Thus, the present system education has not been able to provide suitable linkages with the 'world of work'. Another tragedy is that loans which are supposed to be given to women self-help groups through various welfare schemes are getting diverted as education loans for the middle class. This

situation makes the poor even poorer. In this context is essential to fill the gap between work and education to meet the challenges of globalization.

Work Education in Andhra Pradesh

The present situation in Andhra Pradesh reveals that work education is weekly interwoven in the school curriculum. Emphasis in the school curriculum is mainly on teaching of academic disciplines with little to no exposure to the world of work. Furthermore, even where this exposure is available it does not talk about its pedagogic relevance.

Briefly, the following is an account of the inter-phase between work and education. There is a provision for one art teacher and one craft teacher in every secondary school of Andhra Pradesh. However, art and craft have been not given its proper place in the school time table and recruitment of such teachers has been minimized over the years.

The Government also introduced a scheme of vocational education in 1985-86 in 345 schools based on the recommendations of the V.R. Reddy Committee Report to equip students with the vocational skills required for gainful employment. At present the scheme is being implemented in 297 secondary schools and in 48 mandal vocational educational centres (MVC) in the state. In the initial years the teachers for vocational education were not regularized and were selected by a district screening committee and paid Rs. 300/- per month. After a 23 year struggle the government of Andhra Pradesh regularized their services in 2009. 1030 posts of art and craft teachers have been filled with part time vocational instructors.

16 trades for class VIII to X are taught to children. These include Radio, Transistor and TV repairs and servicing, Poultry, Pisciculture, Horticulture and Floriculture, Sericulture, Wood work and Cabinet making, Farm machine repairs and general mechanism, House wiring and Domestic electrical appliances, Plumbing, Secretarial Practice, Computer Techniques, Composing, Printing and Book-binding, Knitting, Garment making, Darning, Laundry and Dry Cleaning, First-Aid and General Medicine, Nutrition and Medical Store Management, Refrigeration and Air Conditioning.

After class X, 2 year vocational courses are available in intermediate education and for those who choose to leave regular intermediate academic courses diploma courses run by ITIs and Polytechnics are offered.

In pre-service teacher training colleges i.e., in DIETs and Colleges of Teacher Education (CTEs), the trainee teachers are exposed to work experience and SUPW. In DIETs there is a department of work experience. It makes the trainee teachers participate in clean and green activities, social services through NSS. However, in CTEs Project Works and assignments were given for B.Ed. students on SUPW. The weightage is given in their practicum for SUPW activities. They do it for their marks purpose mechanically.

Education and Incompetence

In spite of implementation of varioys quality interventions like Children's Language Improvement Programme(CLIP), Children's Learning Acceleration Programme(CLAP) and Learning Enhancement Programme(LEP) in public schools of Andhra Pradesh the quality of children's learning has not improved over the years. External evaluation studies done in Andhra Pradesh show that only about 60 percent children of class 5 are able to perform the minimum reading, writing and arithmetic tasks required by class 2. This data is corroborated by Pratham surveys too.

Thus, a substantial majority of students coming out of the education system, whether at the school or the first degree stage, are quite incompetent. For instance, someone who has studied English (or, for that matter, one's mother tongue or the state language) for 10 years but can not write a letter correctly or articulate one's thoughts; studied Physics up to B.Sc. but can not repair an electric iron or explain why a fuse keeps blowing and remedy it; or studied economics but can not explain the recent price rise in sugar or cotton. Children in urban high schools catering to the middle class or the privileged sections of society generally do not have the basic psycho-motor, manual skills for doing some household ordinary jobs. They are also unable and unwilling to take part in domestic chores like cooking, sweeping and mopping floors, gardening, cleaning toilets, washing clothes etc. as these tasks are considered to be below one's dignity or social status (no one at school would, however, inquire how the women, belonging to the same class/caste groups, manage to do all these tasks throughout their lives without losing their caste status or identity!). In other words, children have a piece of paper or certification but there is little backing to that paper, in terms of skills or competence. It would not be an exaggeration to state that the school manages to (a) alienate the child from the knowledge base she had acquired from her family and community; (b) destroy her pride in her productive labour as well

as her commitment to the related values; and (c) de-skill her of the multiple skills she had gained before coming to the school.

In the category of skills that are either given low priority in the curriculum or are ignored altogether, one may think of several more, namely social, intellectual, psychological and relational skills and those related to articulation, communication, organising, leadership, initiative, entrepreneurship etc. Attributes such as creativity, intuition, public accountability, social empathy, cultural sensitivity or scientific temper are also not integral to the curriculum inspite of the prevailing rhetoric 'glorifying'. Even in the academic domain, the knowledge is so shallow, bookish and peripheral that it largely represents a perfectly useless accumulation of information, useful to pass an examination but largely unfit for later use. Life continuously makes demands for on-the-ground competence, not for theoretical knowledge alone, the latter's critical role in social development notwithstanding. Hence, the majority of those coming out of the system are not confident either. Education hardly makes them self-reliant, confident and enlightened persons. Making work a part of the school curriculum will help bridge the present gulf between knowledge and work.

Child Work vs. Child Labour

What constitutes 'work' as far as children are concerned largely stems from the different constructs of childhood upheld by groups belonging to different socio-economic status within a given society. In the upper economic classes, there is extended childhood with financial protection provided by the family till the child finishes her/his chosen field of studies and gets into a job. Among the lower income families, on the other hand, the gap between childhood and the next life cycle is much shorter in that children from these sections of society get involved in the adult world of work well before their teenage (Antony and Gayathri, 2002).

In a vast majority of rural as well as urban families, adults demand support from children in household management and supporting parents is considered as part of growing up or being socialised into adulthood. Takei's (1999) study based on a village in Andhra Pradesh, for instance, revealed that the work done by the children in this village is completely embedded in the life structure of their society; that it is an important part of their socialisation and that it helps the family indirectly as much of this work (fetching water, taking care of livestock, preparing food, agricultural work, taking care of siblings etc) is not wage-based work. Therefore, Takei argues that child

labour is not a valid concept to characterise such work. Any discussions on extending universal education to all children in the age group 6-14 years should, therefore, consider the local conditions affecting homes and schools in different communities – the nature of caste-based occupations and how boys and girls are socialised into taking on adult responsibilities (e.g. gender roles).24 So long as work and education are seen as dichotomous categories in children's lives, this problem will persist, especially when one is planning for a work-centred curriculum. Examination of the narratives of child labourers, school 'push-outs' and/ or 'walk-outs' and children who are able to share household responsibilities alongside attending school (some examples can be found in Anveshi, 2003) reveals that childhood without work is completely untenable in our context where there exists a symbiotic relationship between adulthood and childhood. The past two to three decades have witnessed a considerable rethinking about the received notions (dominated by the west) regarding the ways of learning and knowing among children from different parts of the world. There is a consensus on the positive role played by knowledge that is shared and developed between and across generations – knowledge that is derived directly from personal interaction with the physical world in cognitive development. In fact, the proponents of new childhood studies are arguing that childhood is a constituent part of the social order and not a preparatory stage and that children's learning and experiences are to be understood as the site of complex political tensions between children, parents and the State. There is a need to understand the interpretive competencies of children in making sense of their social worlds and in constructing their childhoods.

This emerging re-thinking on the notion of childhood has a critical bearing upon the role of work in the curriculum.. The knowledge, values and skills that children from the marginalised sections acquire from their intense interaction with the physical and social worlds gives them an edge over those who are deprived of such opportunities. The challenge before the planners of education will be to turn this experiential background of the marginalised children into their advantage by enabling them to participate in school with dignity, self-confidence and strength.

Education and Alienation

It is evident data from the government statistics to draw attention to the alarming rate of alienation from school education which the policy makers prefer to term 'drop-out

rate'. Still there are above one lakh children of 6-14 age group are not attending the schools in Andhra Pradesh. The children of the SCs, STs and religious and linguistic minorities, especially the girl child in each of these categories, are not just 'dropping-out' voluntarily or out of ignorance but are either 'walking-out' unconscious protest or are being simply 'pushed-out'.

This is a clear indication that the deprived sections of society (representing more than half of the child population) are deeply alienated from the school system. At one level, as argued above, the 'knowledge' of the school system has emerged from structures that uncritically delegitimise and denigrate local community based knowledge; the curriculum and curricular transaction also reinforce gender and caste stereotypes (see Position Papers of the National Focus Groups on 'Problems of SC and ST Children' and 'Gender Issues in Education'). Students from marginalised communities cannot draw on past learning to build ground concepts because this knowledge is invisible and unavailable as a pedagogic resource in the school curriculum. Many *dalit* intellectuals have critically examined the question of knowledge in a caste-based society: they have argued that the Brahminical hegemony over knowledge implicitly devalued claims on knowing, especially of those rooted in the production process (Guru and Geetha). Ilaiah (1996) has written a poignant account of how alienating and humiliating school experience can be for children of marginalised communities. Most importantly, this has served to destroy self-esteem and confidence in the context of learning.

At another level, the school system as it exists today does not offer, for a substantial proportion of the students, the possibility of a better life engendered by opportunities of breaking out of oppressive structures. Passing a public examination is no guarantee of employment or livelihood. Nor does it equip children with skills to contribute to the local economy and support themselves; in fact, it leaves children alienated from the knowledge and skills available in the local community (Sarangpani, 2005).

What this Position Paper argues for is a pedagogic vision that can challenge the upper caste/class hegemony over the curriculum by placing productive work (in which masses are bound to have an edge over the privileged sections) at the centre of curriculum, just as Gandhi had conceived (Krishna Kumar, 2005). However, the paper recognises that productive work needs to be introduced in such a manner that it not only draws on structures of knowledge and acknowledges life situations that exist in

marginalised communities but also offers a critical frame in which these might be assessed even as newer kinds of work pertinent to the contemporary context are introduced (see 'Typology of Work in Education'). This is in keeping with the pedagogical principle of moving from the known to the unknown. By introducing work as part of curriculum, it may become possible to draw on community resources to make learning meaningful as well as to equip children with knowledge and skills that will allow them to access higher education and/or support themselves in the emerging economy.

Gender

As discussed, the dominant elite character of knowledge, related to the upper class/ caste structures of Indian society, is embedded in the curriculum, textbooks and evaluative procedures. To this we add the patriarchal dimension of knowledge that defines both the overt and hidden curriculum. In the context of work-centred curriculum and Vocational Education and Training (VET) courses, it would be useful to recall the following excerpt from the National Focus Group on Gender Issues in Education Report: "Schooling reinforces the gendered inequality of socialisation across all divides. The schooling of girls remains embedded in the societal context even though it provides an expanded space for growth of women. In fact, school curriculum and schooling become active instruments of cultural reproduction and social control . . . . . .Schooling becomes another form of domestication. For example, school textbooks depict this gender-based domestic division of labour. In the classroom too, just as *dalit* children are expected to perform the menial tasks, girls are often relegated the work of cleaning and sweeping, reinforcing the gendered division of labour."

The work-centred curriculum and VET courses must ensure that productive work does not become a tool for promoting gender stereotypes. It would be a challenge to design pedagogy in order to "empower girls from diverse backgrounds to overcome disadvantages rather than reinforce their subordination."

The Challenge of Disability

The tendency to invariably place the disabled in a separate category is alarming. It is because we are made to see them as deficient, that we talk about providing skills that will provide the bare minimum to them but not make them capable of becoming productive citizens of the country.

Disability is largely perceived as a medical issue. That is, society associates disability with physiological, anatomical, or mental "defects" and holds these conditions responsible for the disabled person's lack of full participation in the economic life of our society, rather than viewing their exclusion for what it is — a matter of hard-constructed socio-economic relations that impose isolation (and poverty) upon the disabled people. This "medicalisation" of disability places the focus on curing the so-called abnormality — the blindness, mobility impairment, deafness, mental or developmental condition rather than constructing educational and work environments where one can function with such impairments.

From a business perspective, the hiring or retaining of a disabled employee represents non-standard additional costs when calculated against a company's bottom line. Employers characteristically assume that they will encounter increased liability and lowered productivity from a disabled worker. Such notions have a direct impact on the educational system which becomes an ally in keeping the disabled unskilled, thereby adding to their woes. In this sense, disability represents a social construct which defines who is offered a job and who is not. An employee who is too costly (significantly disabled) is not likely to become (or remain) an employee at all. Therefore, we teach skills that have little or no meaning outside the special school classroom. With these so-called vocational skills that we impart, the disabled will never be able to catch up with their peers or transfer the skills taught in school to the real world, because society has no jobs for them. Thus we deny most of the disabled a real chance of becoming gainfully employed and living a healthy life.

What needs to be remembered is that disabled are not a homogenous group. So while a more vocationally oriented programme would certainly benefit some specific groups of children, the system actually has a habit/history of placing far too many children in special education in the first place and then fitting those children in 'life skills' classrooms.

What is needed is that the teachers are trained to create realistic and meaningful education that has opportunities for productive work for all. The goal is to get students as good a shot at life as they can get.

A curriculum which gives place to work has a special significance for the disabled as it facilitates a multi-sensory and purposeful approach from the pre-school stage onwards. When this approach is combined with additional human and technology

(including ICT) support during the school years, most of the disabled children should have a fairly good opportunity for unfolding their holistic potential in regular schools, leaving only a small percentage of acutely impaired children who might still need special schools. In this framework, the option of a modular VET course with lateral and vertical linkages would be available for the disabled child after going through 8-12 years of such a curriculum. This is by far a better proposition than the present limited option of a terminal vocational stream only at the plus-two stage.

3. School Curriculum and Work

Work is a part of the childhood of most Indian children. Children participate in tasks like cooking, cleaning, sweeping, gardening as well sometimes in farming, pottery, carpentry, stitching and weaving of various products, fishing, food processing etc.. Children learn not only the aforesaid skills in this process but also various social and affective competencies like cooperative working in a group, tolerance, respect, discipline, creativity, effective communication, aesthetics and entrepreneurship-cum-social accountability, in this process. For many children such experiences are not natural and there is no space for the variety of these works in the teaching-learning process at school. This leads the school to devalue work with hands and instills in children a feeling of disregard for it.

This adds to the feeling that the school is Rooted in the Brahmanical organization of society, that has been accentuated by the colonial legacy and forces of globalisation. The idea of work therefore, has little respect and almost no place in the curriculum. The school program and culture is textbook-centred. The idea of learning through productive, manual work is alien to our education system and the knowledge that is 'certified' is that which is prescribed in textbooks representing the dominant castes and classes. The notion of 'ideal childhood'(characterised by innocence, vulnerability and absolute dependency on adults) and 'normal child' (upper caste, upper class non-disabled male, most likely from the Hindi heartland) as supported by the textbook writers, and illustrators, policy planners, teacher-educators as well as the visual culture (TV, Photography) in most societies; the middle class academia and bureaucracy as well as the international child welfare organizations see Vasanta, 2004 for a detailed discussion) also falls within this paradigm. As a result, only lip-service has been given to making work a part of the school curriculum over the years. Spaces for work-experience and SUPW that have been created by policy documents have trivialized the concept and reduced it to merely art and craft activities or hobbies.

Why should work be made a part of the curriculum?

5.   Work gives space to the social and economic realities of most Indian children in school. it helps children in connecting their school learning to their contexts making it meaningful.

6.   Children are curious by nature and also enjoy working with their hands. They want to understand the processes that underpin the various products they use.

7.   Making work a part of the curriculum helps in bridging the gap between the 'productive' and the 'schooled' groups of society.

8.   Work situations have immense potential for acquiring various competencies-cognitive, social and affective. The learning in such environments is both, *hands-on* and *minds-on*.

The role for work in the school curriculum

The school timetable for classes 3 to 10 needs to make space for exposing children to various types of work and for realizing its pedagogic potential. This position paper describes the pedagogic potential of work in terms of the following competencies-

Cognitive competencies- The word cognition is defined as both 'the mental processes of knowing which include perception, reasoning and intuition as well as 'that what comes to be known or knowledge'. The set of competencies can include-

- Planning for work
- Being organised and orderly in activities
- Prioritizing activities
- Use of appropriate tools and materials
- Workmanship and skill in the performance of work
- Planning for new products/ innovating/ creativity

Social competencies

As the word 'social' suggests these competencies include those which facilitate communication and interaction with others. The set of competencies can include-

- Cooperation- to be able to work constructively in a group, sharing and helping others and in turn asking for help where required.
- Listening
- Following directions
- Taking turns
- Being open to different points of view
- Clearly communicating with others
- Respecting other co-workers

Affective competencies- The word affective is defined as 'influenced or resulting from emotions'. Affective competencies thus refers to a set of competencies which determine her strength of character and are influenced by her ability manage her emotions. The set of competencies can include-

- Persistence and self-discipline – the ability to carry on in difficult situations
- Patience
- Open to new experiences/ curious
- Positive attitude
- Empathy – respecting and giving space to differences in others' world views
- Neatness and cleanliness in work; care of tools and leaving them in proper place after work
- Appreciating diversity – valuing differences both in nature and society
- Valuing nature – seeking to understand and harmonize one's actions with nature
- Valuing manual labour and those who earn their living through it

Guidelines for making work a part of school curriculum

1. Work refers to any productive manual work which reflects the local trades and traditions like agriculture, fishing, food processing, carpentry, tailoring, pottery etc. It does not need to be technology driven; the important thing being that it must be a part of the socio-economic relations that the child is either involved in or witnesses.

2. The choice of work will be depend upon the age of children. Children in upper primary classes can be given work which requires higher motor dexterity in comparison to children from primary classes.

3. The choice of work will depend upon the material resources that the teacher can garner from within the school , as well as the community.

4. The choice of work need not depend upon whether it is connected to a topic of a curricular area. For e.g. the choice of using food processing for a work based

classroom is not dependent on a science topic like preservation of food products, or the choice of tailoring or carpentry need not be dependent on a topic of measurement in Mathematics or a gardening activity on a poem about a garden.

5. The choice of work has no relationship with a vocation that child would choose in his secondary or higher secondary classes or any job that he would take up in her future life.

6. The choice of work is not dependent on whether it is technology driven manual work or not.

7. All children irrespective of their caste, class and gender should take part in the work based class.

8. The teacher should also be involved in the production process and her role should not merely be that of a supervisor or someone who is teaching the work

9. Whenever need be the teacher should ask members of the local community to come into the classroom and teach the trade.

10. Peer education should be encouraged. As far as possible children should be asked to work in groups.

11. The teacher should be clear about the competencies she wants to build in children while conducting the work based class. These competencies would in turn serve as parameters for assessment for the teacher.

4. Management and Assessment of Work and Education in the Classroom

This chapter will first discuss the management of work and education experiences at the school level. It will then provide a list of works that can be taken up in school settings. It will end with how these various works can be assessed.

Management of Work and Education

All teachers of the school are required to use Work as a pedagogic tool in the classroom.

Making work experience an integral part of the school time-table requires the school team to understand and thus be oriented to some basic questions and issues that have been flagged in the previous two chapters, namely,

1.   What is work and education?

2.   Why is it needed?

3.   What is the difference between child work and child labour?

4.   What are the implications it has on issues of gender and disability?

The teacher also requires guidance in how to plan for a work-centred class. Some guidelines have been given below-

To plan for a work-centered class, the teacher should-

- Select a productive manual work which is a part of the socio-economic context of the child based on the availability of resources and level of children.

- Arrange materials and resources. This may require the teacher to reach out to the community or other institutions, where the requisite resource persons are available

- Orient the children to the work that they are going to undertake in the classroom and how it relates to their learning.

- Be one of the workers, like children and not merely a supervisor or someone who is teaching the work.

- Prepare for the class by making a list of the competencies be they cognitive, social or affective that she aims to build in the children. These will also serve as a framework for assessment.

- Assess students for their ability to work as a team, confidence in using the equipment and enthusiasm in engaging in the work. The assessment should be more on the proccess of the functioning of the child and her relationships rather than to knowledge about work.

- An important area that the teacher needs to think about is the orientation of Parents and Community: This is required for two reasons. One, effective implementation of Work Education in schools will require community support and participation. For e.g. asking various artisans like carpenters, potters, tailors, etc to be a part of the classes. Member of the community can also help arrange for Exhibition-cum-sale of Products that children have produced. Second, it is important to orient parents to the philosophy of work and education, as parents might not realise the pedagogic significance of these and not be initially very supportive of such initiatives in school.

II   Typology of Work in Education

We have earlier contended that the notion of work in education emerges from its centrality in all cultures and life situations for people in all age groups. The place of work in education gains added significance as it forms the bedrock of all livelihoods, especially those that are embedded in the socio-cultural ethos of human beings. In this sense, we are attempting to present a possible typology of work which might help teachers, teacher educators and curriculum developers to plan the work for different stages of school education. Before we do this, it is critical to make the following points:

1. The choice of work as a pedagogic medium will be governed by the developmental stage of the child or groups of children one is planning for. This consideration will include factors such as the psychological age of the child, her physical strength and her skill level.

2. The pedagogic planning must ensure that the chosen type of work is undertaken, as far as possible, by a collective of children (this may include some older or more skilled children for providing the necessary leadership) in order to encourage a sense of cooperation, team work and community spirit.

3. We wish to emphasise that allocation of work to children must be free of all considerations of class, caste, religion, gender or social status of the child. Stereotyping in selection of work must be strictly avoided, as it violates the basic principles enshrined in the Constitution. Nor do such biases promote a democratic, egalitarian, secular and enlightened society. There are only two pedagogic situations where the teacher may seem to be acting in apparent contradiction to this rule. One, the teacher may like to take advantage of the child's experiential background in formulating her role in a work-centred team, as discussed above. Two, physical or mental disability of the child in any one particular dimension may guide the teacher in modulating or phasing productive tasks, materials or the tools in accordance with the nature/degree of disability so as to ensure inclusion of such children in the peer teams. Even here, the additional qualities (insights, skills, sensitivities) that the disabled children are known to develop gives them an edge over the rest that the teacher would have to keep in mind.

4. The work undertaken by a child need not indicate her future vocation, profession or source of livelihood, not even the work undertaken at secondary or senior secondary stages. Indeed, a child would have had the experience of doing several types of work and developing a range of skills and other generic competencies from pre-primary stage to Class XII.

5. Care is to be taken to ensure that the work chosen as a pedagogic medium (a) represents as many categories as possible at each stage of education viz. pre-primary, primary, upper primary, secondary and senior secondary; and (b) the skill component increases in complexity as the child matures in physical strength, age and the stage of education. A system of credit accumulation, grading and respective weightages would need to be designed for the purpose of evaluation and assessment so that the multi-category and multi-skill character of work in curriculum is promoted. It is in this perspective that the following typology may be examined. This is only a suggestive typology and the teachers, teacher-educators and curriculum developers (and, of course, students) should feel free to evolve another typology that might be more meaningful in their specific context.

A. Integral to Daily Living

A.1   Sweeping and Scavenging; Making of Brooms, Mops and Scoops.

A.2   Health, Hygiene and Sanitation

A.3   Cooking, Nutrition and Serving

A.4   Processing of Foods, Spices, and Other Food Ingredients

A.5   Laundry and Preparation of Soaps and Detergents

A.6   Tailoring, Stitching, Embroidery and Knitting

A.7   Care during Pregnancy and Early Childhood Care

A.8   Interacting with the Disabled, Infirm and the Sick

A.9   Old Age Care

A.10   Repair and Maintenance of Household Gadgets

A.11   Preparation of Cosmetics, Aromatics and Herbal Medicines

A.12   Saving of Water, Electricity and Fuel Consumption

A.13   Sharing of Household Responsibilities

A.14   Domestic Budgeting and Planning

B. Habitat and Shelter

B.1   Nursery and Gardening (including composting)

B.2   Landscaping and Aesthetics

B.3   Making of Bricks, Cement Blocks, Tiles, Pipes etc.

B.4   Clay work

B.5   Carpentry, Furniture and Designing

B.6   Metal Work

B.7   Working with Plastics

B.8   Working with Glass

B.9   Housing (Designing and Construction)

B.10   Electrical Fittings

B.11   Plumbing and Sanitation

B.12   White-washing and Painting

B.13   Potable Water

B.14   Ground Water and Rainwater Harvesting

B.15   Drainage and Sewage

B.16   Biodegradable and Non-biodegradable Waste Management

B.17   Environment: Biodiversity, Conservation and Maintenance

B.18   Renewable Sources of Energy (e.g., solar and wind energy)

B.19   Safety: Fire, Earthquake, Cyclones, Floods and Pollution.

B.20   Making of Toys, Science Kits and Teaching Aids

B.21   Field Studies of Flora and Fauna; Developing a Herbarium

B.22   Animal Care

C.   Transport

C.1   Bullock Cart: Designing, Construction and Innovation

C.2   Bicycle: Assembling, Maintenance and Repairing

C.3   Boats, Canoes and Ships: Repair, Designing and Construction

C.4   Automobile (2-wheel, 4-wheel): Repair and Maintenance

C.5   Tractors, Cranes and other Hydraulic Machines: Operation, Repair and Maintenance

C.6   Packaging and Forwarding

C.7   Mapping and designing roads, bridges, ropeways etc.

B.   Agriculture, Agricultural Processing and Forestry

D.1   Farming (including organic and dry land farming)

D.2   Horticulture

D.3   Animal Husbandry (including breeding)

D.4   Fisheries and Aquaculture

D.5   Poultry

D.6   Sericulture

D.7   Dairying

D.8   Seed collection, storage and biodiversity

D.9   Fodder, Pastures and Grasslands

D.10   Plantations (Tea, Coffee, Spices etc.) and Processing of Products

D.11   Irrigation and Drought Management

D.12   Forest Nursery and Tree Plantation

D.13   Forest Conservation, Wild Life (including mapping) and Human Settlements

D.14   Timber, Other Forest Produce and Regeneration of Forests

D.15   Cultivation of Aromatic and Medicinal Plants and Processing

D.16   Food Processing, Preservation, Conversion and Packaging

D.17   Agricultural Tools and Machinery

D.18   Agricultural Engineering

D.19   Bakery

D.20   Storage, Marketing and Finance

D.21   Quarantine and Patents

C.   Textiles, Leather and other Fibre-based Materials

E.1   Soft Toys

E.2   Cotton, Wool and Synthetic Fibre: Spinning, Weaving, Knitting, Processing, Dyeing and Apparel Making

E.3   Leather: Curing, Processing, Dyeing and Products

E.4   Jute, Coir, Cane etc.: Curing, Processing, Dyeing and Products.

E.5   Designing and Marketing

C.   Tools and Machines

F.1   Hand Tools

F.2   Hydraulic Tools

F.3   Electrical Gadgets and Tools

F.4   Electric Motors

F.5   Internal Combustion Engines

F.6   Levers, Gears, Brakes, Cams and other Basic Components of Machines

F.7   Casting, Welding, Turning, Fitting etc.

F.8   Electricity: Production, Supply and Distribution

F.9   Radio and Public Address Systems

F.10   Domestic and Industrial Safety Equipment

F.11   Electronics, Computerisation and Control Systems

F.12   Robotics

G.   Services

G.1   Printing on Various Materials

G.2   Budgeting, Accounting and Evaluation of Assets

G.3   Maps, Surveys and Project Planning

G.4   House Safety and Maintenance

G.5   Testing of Water, Air and Soil

G.6   Pathological Testing and other Para-medical Services.

G.7   Transcription and Documentation

G.8   Translation and Interpretation:

   (a)   From one Indian Language to another;

   (b)   From English to an Indian Language and *vice versa*; and

   (c)   From Braille/Sign Language to an Indian Language/English or *vice versa*.

G.9   Preservation and Maintenance of Old Records and Museum Specimens.

G.10   Computers: Software and Hardware

G.11   Information and Communication Technology

G.12   Banking, Insurance and Finance

G.13   Creating and Maintaining Libraries, Documentation Centres, and Reading Rooms.

H.   Art, Music, Theatre

H.1   Making of Musical Instruments

H.2 Making of Heritage Crafts (including puppets)

H.3 Pottery, Murals, Sculpturing and Graphics

H.4 Stagecraft

H.5 Jewellery Making, Stone Polishing

H.6 Event Management

I. Health, Sports and Physical Education

I.1 Public Health Services (including epidemic control)

I.2 Mid-wifry

I.3 Knowing your Body, Sexuality and Fertility Awareness

I.4 Occupational Hazards and Health Problems

I.5 Designing and Making of Health and Sports Equipment

I.6 First Aid and Nursing

I.7 Medical Technology

J. Community Work and Social Action

J.1 Local History Studies

J.2 Field Study of Under-nutrition/Malnutrition and its Causes.

J.3 Local Studies of (a) Occupations; (b) Technologies and Skills; (c) Work Force; (d) Natural Resources; (e) Habitats; (f) Modes of transport; (g) Sources of water and energy; (h) Bio-diversity; Creating Biodiversity Register; (i) Markets; and (j) Official Development Agencies and their programmes.

J.4 Interaction and Study of Panchayats, Primary Health Centres, Block/District Development Office, Police Stations, Post Offices, Cooperatives, Banks, Courts, *Mandis*, District Magistrate's and Revenue Offices (or Municipal Offices) and digital data collection at Block and District levels.

J.5 Field Studies of (a) Social Stratification and Power Structures; (b) Gender Inequity and Violence Against Women; (c) Gender Differences Relating to Work; (d) Adult Perceptions of Childhood; (e) Child's relationship with work; (f) Status of Child Rights; (g) Status of the Disabled; and (h) Diversity of Languages, Religions, Castesand Socio-Cultural Backgrounds.

J.6   Field Studies of local Balwadis/ICDS Centres, educational programmes and schemes, educational status, types of school managements and fee structures; social and gender disparities in and through education, teaching-learning processes, quality of community participation in schools, implementation of laws relating to child rights and educational rights, contribution of education to social development and the changing trends in the education system.

J.7   Proactive involvement in (a) Vaccination Campaigns; (b) Health Check-ups; (c) Epidemic Control; (d) Maintenance of Land Records; (e) Right to Information Campaign; (f) Issues relating to Women's and other Socio-Cultural Rights; (g) Legal Literacy and Aid Programmes; (h) Child Rights and Right to Education Programmes; (i) Local elections; (j) Development Programmes (including Employment Guarantee Scheme); and (k) Decennial Census.

J.8   Organising (a) science and technology-based services for the community and/or the locality; (b) Support for the Balwadis / ICDS; (c) Interventions for Universalisation of Elementary Education; (d) Support for the disabled, including learning Braille/sign language; (e) Support for the old persons and the sick; and (f) Any other similar social action programmes.

J.9   Compilation of local folk songs, folk tales, riddles and toys.

J.10   Studying disasters, riots, incidents of violence (particularly against women, children and *dalits*), accidents and other disturbances and providing relief therein.

From the above typology of work one has to evolve a sound pedagogic medium of knowledge through the work. The school curriculum must reflect the above components of work in the designing of syllabus and in writing text books, this not the closed list,. One can add or improve and make desired changes according to their context.

The aims of starting this work is of several-fold:

1.   To give the students a glimpse of the real world of work.

2.   To give them an opportunity to learn from society.

3.   To learn to solve problems and deal with unexpected situations.

4.   To talk to and get to know people from different walks of life.

5. To work manually and take pride in it.

6. To have a change of scene from the routine at school and get new ideas.

Assessment of Work and Education in the Classroom

Assessment of work based learning cannot be one time affair and neither can it be the exercise of only judging the beauty of the product created or service rendered. It will require assessment of cognitive, social and affective domains of a child's learning. The various basic principles, which should be considered while evaluating the students-

- Evaluation to be done according to the objectives of teaching/competencies of children as well as the learning experience provided.

- Evaluation should be comprehensive, as far as possible, and must be continuous (each activity/project/unit must be evaluated immediately after its completion).

- Evaluation must be done based on a predetermined indicators.

- The process of evaluation should provide necessary feedback to children.

- Considering that the process of evaluation in work education is a difficult and delicate task and the teachers themselves require attaining experience gradually through the process, one should not be over ambitious, but must be sincerely forward looking in his works.

Basis of Evaluation

The basis of evaluation can be described in the form of the competencies that that it can help to develop in children

Cognitive competencies-

The set of competencies can include-

- Planning for work

- Being organised and orderly in activities

- Prioritizing activities

- Use of appropriate tools and materials

- Workmanship and skill in the performance of work

- Planning for new products/ innovating/ creativity

Social competencies-

The set of competencies can include-

- Cooperation- to be able to work constructively in a group, sharing and helping others and in turn asking for help where required.

- Listening

- Following directions

- Taking turns

- Being open to different points of view

- Clearly communicating with others

- Respecting other co-workers

Affective competencies-

The set of competencies can include-

- Persistence and self-discipline – the ability to carry on in difficult situations

- Patience

- Open to new experiences/ curious

- Positive attitude

- Empathy – respecting and giving space to differences in others' world views

- Neatness and cleanliness in work; care of tools and leaving them in proper place after work

- Appreciating diversity – valuing differences both in nature and society

- Valuing nature – seeking to understand and harmonize one's actions with nature

- Valuing manual labour and those who earn their living through it.

5. Vocational Education

The Kothari Commission clearly distinguishes between work experience and vocationalistion of education and states that 'a strong vocational basis should be given to secondary education.'

The prevailing scheme of Vocational Education and Training (VET) is restricted to mostly those children who have completed at least ten years of formal education. This is true for those who enter at the Plus Two stage in the distinct stream of vocational education (parallel to the general or 'academic' stream) as per the 1986 policy prescription (NPE-1986, Sections 5.17 and 5.23) as well as those who seek training in ITIs or Polytechnics after obtaining a Class X certificate (Class VIII certificate in some trades). However, the prevailing 1986 policy imperative of providing for vocational education as a distinct stream at the Plus Two stage has collapsed (instead of having 25 per cent of the enrolment at this stage by the year 2000, the stream barely has 5 per cent enrolment in 2004!). At least five reasons can be cited for this:

(a)   Vocational education at Plus Two stage stands in a vacuum without a firm foundation of work-centred education upto Class X.

(b)   Vocational education was misconceived as a terminal stage lacking both vertical and lateral linkages. It was designed chiefly as a strategy for 'diverting' children from secondary/higher secondary and higher education, rather than as a preferred and dignified option for wage employment, self-employment or pursuing other sources of livelihoods. [For instance, the students of the Plus Two vocational course in Nursing in Tamil Nadu were not even eligible for the B.Sc. course in Nursing since their vocational course lacked the required subjects like physics and chemistry. Vertical linkage, however, did exist in the Tamil Nadu Plus Two course related to engineering which enabled the students to enter the engineering colleges. The provision for quota in the engineering colleges in the state for the Plus Two students with vocational course in engineering is stated to be the major reason for the popularity of these courses in Tamil Nadu.]

(c)   Vocational education was planned in isolation of the rapidly changing economic and technological scenario, lacking in-built design for

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responding appropriately to the emerging challenges with flexibility and creativity. Thus in several states the vocational education courses have not been revised for decades. For instance, it was reported that the vocational courses in Tamil Nadu had not been changed since the programme's inception in 1978-79.

(d) The parallel distinct stream of vocational education at Plus Two stage was perceived by the students as well as their parents for good reasons as an inferior stream ('a last resort') when compared to the academic or general stream

(e) Inadequate resources, both human and infrastructural, were provided which never allowed the programme to reach even the critical take-off stage.

A serious concern was also expressed at this National Focus Group (NFG) meetings with regard to the following three groups who do not have any access in the prevailing policy perspective to vocational education and training:

(a) more than half of the 6-14 age-group children who either do not enter school at all or leave school without completing even primary/elementary education

(b) almost two-thirds of the children who do not complete Class X (the so-called 'drop-out rate' among SC and ST children at Class X is 71.9 per cent and 80.3 per cent respectively); as per one estimate, at least 77 per cent of the children in the 16-18 age-group (almost 3.6 crore) and 56 per cent of the 14-16 age-group (almost 2.6 crores) who do not even enter the Plus Two and secondary stages respectively; and

(c) less than 7 per cent of the relevant age-group enter higher education. The present policy thus implies that almost 17 crore children in the 6-18 age-group (out of a total of about 29 crore children) are not even eligible to enter any formal programme of vocational education and training whatsoever. The actual access to vocational programmes is indeed miniscule. The only opportunity of skill formation and thereby improving employability they have exists either in the vast informal and non-formal space offered by the unorganised sector (masonry,

plumbing, electrical works, auto-repair, equipment maintenance, tailoring, turner, welding etc.) or the recently emerging scope (still quite restricted) of training offered by the organised sector on low-stipend internship model under the Apprenticeship Act. The contribution of the organised sector in this regard is limited by the fact that this sector employs no more than 7 per cent of the workforce in India. In any case, the Government plays essentially no role in vocational education and training offered by either the vast unorganised or the organised sectors, not even in monitoring the quality or establishing equivalence in certification. The NFG members who articulated their concern for the lack of access to vocational education and training for the vast majority of children and young people and the negligible role of the State in this critical field, contended that a realistic policy to address this crisis is a pre-requisite, along with other factors, for an egalitarian, democratic and enlightened development of Indian society.

Thus, the following things need to be recapitualised when we talk about vocational education-

- Vocational Education must not be confused with initiatives which are utilizing the pedagogic role of work in education; one must learn to appreciate the differences between the objectives and pedagogic framework of the two concepts.

- Vocational Education can be meaningful only if it responds to the needs of both the organised and unorganised sectors in a holistic manner and incorporates the technologies and pedagogies already being practiced widely in the society outside the school through the internship mode, especially in the vast unorganised sector.

- Vocational Education and Training (VET) for those who are seeking dignified options for their vocations/livelihoods after either completing their school education or being 'pushed-out' or 'walking-out' before completing education.

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