

Effectiveness of Art Integrated Learning Addressing the Issues and Concerns of Adolescence: A Pilot Study using Audio-Video Programme

Ruchi Verma¹ & Mukta Satsangi²

¹Professor, Department of Education in Science and Mathematics, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi

Email: ruchi.verma@ciet.nic.in

²Junior Project Fellow, Department of Education in Science and Mathematics, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi

Abstract

Integration of art and technology with the teaching-learning process opens up the door to provide opportunities for experiential learning. Adolescence is a delicate life stage where a child undergoes changes (physical, emotional and behavioural) and faces challenges to deal with these issues due to a lack of awareness and knowledge of the fact. It's important to prepare children for facing the challenges and issues related to adolescence. But often this area is affected by a lot of hesitation, social taboos and myths; hence some creative, innovative and interactive ways to deal with these issues are needed. In the present study, a novel approach in the form of an audio-video program focusing on the integration of art forms, technology and nature with the scientific facts on adolescence, its challenges and related issues was validated. The study was conducted on 85 learners and 12 teachers of four government schools. The study was found beneficial for teachers and adolescents in making them understand how to handle the issues and challenges in an interactive, interesting and joyful manner through the Art Integrated Approach to Learning. Such audio-video material will increase awareness to minimize the risk factor and indulging in the wrong habits of learners.

Keywords: Adolescence, adolescent-related issues, school, parental involvement, myths in society, art-integrated learning

Introduction

The ultimate aim of education envisaged is to nurture the holistic development of a learner to make independent thinkers, problem solvers, think tanks for new ideas constantly and creatively to meet the challenges of the time. National Education Policy 2020 (MHRD, 2020) recommends experiential learning and the merging of disciplinary boundaries to provide opportunities for learners to achieve their goal. The term holistic development directs towards a child-centered approach to learning by creating conducive learning environments through various age-

appropriate activities. The approach recommends catering to various needs of learners towards all-round development to achieve the ultimate goal of education.

Every human being shows three distinct phases in their life – juvenile phase, reproductive phase and senescent phase and three distinct life stages – childhood, adolescent stage and adulthood. The adolescence phase which ranges between 11-19 years of age group is regarded as a transition period from childhood to adulthood (WHO, 2017). During this phase, a feeling of independence and establishing one's

own position and identity in a peer group, family and society generates, and hence requires attention and special needs (Ragelienė, 2016).

When a child enters the adolescence stage, many internal and external changes occur. These changes are physical, psychological, emotional, social, cognitive and behavioural (Karademirci et al., 2012; Özdemir et al., 2016; Todd, 2007). During this time, a child is totally unaware of how to deal with the changes and issues related to adolescence, hence is regarded as the most challenging stage of life. However, these problems and issues are transient but the majority of the time left unnoticed. The emotional problems are often neglected as they cannot be detected easily, hence leading to long-term social implications such as isolation, depression, loss of self-esteem and confidence, etc. in an adolescent (Masselink et al., 2018). The root cause for this is the lack of proper education and support from parents, teachers and society. Therefore, this phase requires a lot of attention, care, moral support and proper guidance from parents (Ruholt et al., 2015), teachers (Verhoeven et al., 2019) and society (Panahi, 2015) which helps in the overall positive development of an adolescent. A school is an institution which provides opportunities for all-round development where an adolescent spends about half of the day. As the teacher encounters them constantly, they play a vital role in understanding and helping them to overcome their problems and issues by listening and responding positively. But in reality, this, generally, could not happen due to the hesitation of teachers and students to talk about such issues. The curriculum at school education has provided space for dealing with such issues at appropriate level. The chapter "Reaching the Age of Adolescence" is the part of the syllabus in science for class VIII (NCERT Science Textbook for

Class VIII) but it has been found through interaction with teachers and students that not much is discussed about it in classrooms and very less emphasis is given to it. The lack of guidance and care from the parent's side also pushes adolescents to resolve their queries by seeking help from non-reliable resources like peer group interaction, using technology viz. television, internet and other social media aids (El et al., 2016). In most cases, their curiosity remains unanswered or they get misleading answers. Consequently, adolescents show greater risk to develop various psychosocial problems, which may influence their identity, self-esteem, and academic performance (Timalsina et al., 2018). Thus, it is important to have discussions, awareness, and prevention programmes to help adolescents with the issues they face.

Ample research studies have been conducted in the areas which mainly focused on psychosocial problems, emotional and behavioural problems faced by adolescents' (Banstola, 2017; Bista et al., 2016; Huli, 2014; Koirala et al., 2016; Pathak et al., 2011; Sharma, 2020). Few studies have addressed how to deal with these issues by coping with stress and discussed the role of parents, teachers and the community in adolescence issues (Jahan & Shakil, 2015). But no such attempt has been found on how to deal with the issues related to adolescence by dealing with scientific concepts in an artistic, interesting, and interactive manner.

Keeping all this in view and the need of the hour, a script focusing on such delicate areas was prepared and converted into an audio-video programme "*Kishorawastha ki Aur*" (कशिरावस्था की ओर). In the study, the audio-video programme was used as an educational tool to bring awareness about issues related to adolescence and how to handle them.

The audio-video programme has been designed by integrating scientific concepts with art to present things in an interesting, interactive and child-centered manner. This programme is dedicated to all the adolescents' who struggle with all sorts of questions, curiosities and challenges related to their developmental (adolescent) stage. This was an endeavour to present their natural curiosity about themselves. The programme also aimed to break certain myths and misconceptions regarding adolescence prevailing in society. The programme is an effort to present the integration of science with nature and art forms like dance, music and puppetry to enrich student's perspectives and make their learning facile and interesting, thus promoting art-integrated learning. This programme is also helpful for teachers who otherwise find it difficult to talk about these topics.

Research Questions

The study attempted to answer the following questions:

- Does the audio-video programme fulfill the objective of linking science with arts and nature?
- Can audio-video programmes be effective to prepare children to discuss issues and challenges faced by them during the age of adolescence?
- Does the audio-video programme bring any change in the perspective of children?
- Does the audio-video program promote a scientific understanding of the issues and stereotypes related to adolescence?

Objectives of the study

The major objectives of the present study were:

1. To develop a linkage between science, art and nature.
2. To create awareness about issues and challenges related to adolescence.
3. To improve the scientific perspective on adolescence by employing the connection between science and nature.
4. To demystify stereotypes and prevalent assumptions related to adolescence.

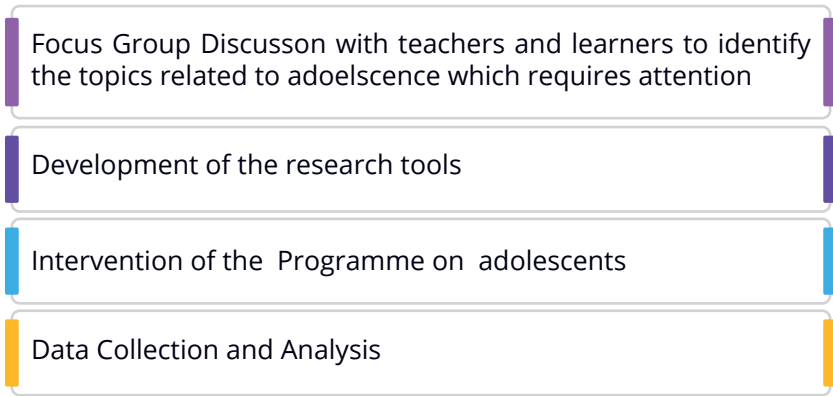
Thus, the proposed work aims to create awareness and how to deal with the issues related to the adolescent stage with the help of the developed and produced audio-video programme "*Kishorawastha ki Aur*" by taking up a small study on the effectiveness and achievement of the proposed objectives.

Research Methodology

Study Design

The variables used for the study were independent and dependent variables. The independent variable was the developed audio-video programme. The three dependent variables were adolescents' awareness about the issues related to adolescence and how to deal with them, the breakdown of myths or taboos related to adolescence prevailing in society and understanding adolescence with the help of art-integrated learning.

Figure-1: Steps of research study



Sample size and Sampling method

The study was conducted in four government schools mentioned in Table 1. From the selected schools, learners of class VIII with the age range of 12-14 years were taken as samples

for the study. The data was collected from a total of 85 learners and 12 teachers. The research study consisted of a pre-experimental research design and single group pre-test-post-test method and the technique adopted was purposive sampling.

Table-1: Details of the sample schools with number of learner' and teachers who viewed the developed programme and responded to the questionnaires

S. No.	Name of the school	Nature of the school	Number of learners			Number of teachers
			Number of boys	Number of girls	Total learners	
1.	Rajkiya Pratibha Vikas Vidyalaya (RPVV), Vasant Kunj, New Delhi	Co-education	16	9	25	2
2.	Sarvodaya Kanya Vidyalaya (SKV), Gazipur, Uttar Pradesh	Girls	-	15	15	4
3.	Government Boys Senior Secondary School (GBSS), Gazipur, Uttar Pradesh	Boys	17	-	17	4
4.	Navyug Senior Secondary School (NSSS), Peshwa Road, Delhi	Co-education	13	15	28	2
Total			46	39	85	12

Tools for the study

The tools used for the study were developed in two phases – Phase I and Phase II. During Phase I, a script in the form of audio-video material was developed and produced by CIET, NCERT. During Phase II, questionnaires for learners and teachers were developed. The tools used for the study are listed below:

- a. Audio-video programme “Kishorawastha Ki Aur”
- b. Pre-intervention questionnaire for learner
- c. Post-intervention questionnaire for learner
- d. Pre-intervention questionnaire for teacher
- e. Post-intervention questionnaire for teacher

Intervention stage

The developed pre-intervention questionnaires were filled out by learners and teachers to get feedback on their existing perception of adolescence and issues related to it. Afterwards, they were shown the developed audio-video programme followed by filling out post-intervention questionnaires to seek change in their perception (if any) on dealing with challenges faced during adolescence and the use of nature and art-integrated learning to understand them.

Data collection

The data was collected from learners and teachers in the form of filled questionnaires. There was no missing data.

Results

Learners' perception of the adolescent stage and issues (pre-intervention

results)

The respondents have felt various changes in them in the recent past in their physical appearance (60 per cent), academic performances (55.2 per cent), eating habits (52.9 per cent), sleep disorders (23.5 per cent), mood swings (41.1 per cent), fights or arguments with elders (11.7 per cent), paying attention only to friend's advice (24.7 per cent), attraction towards opposite sex (15.2 per cent) and properly dressing up for the school (64.7 per cent). 43.5 per cent of respondents were not uncomfortable with these changes happening to them. If given an opportunity to share their experiences and problems with someone, 65.8 per cent respondents would like to share with their mother, 23.5 per cent with their father, 18.8 per cent with their teacher, 23.5 per cent with their friends, 18 per cent with their siblings but nobody wants to share with a counsellor. 50.5 per cent the respondents want their parents should listen to them patiently, 56.4 per cent want their parents to respond positively towards them and 50.5 per cent want their parents to behave friendly with them. To seek answers for such changes, 61.1 per cent of respondents discuss with their friends. 28.2 per cent watches videos, 29.4 per cent surf the internet, 38.8 per cent ask parents and only 20 per cent ask the teacher. According to the respondents, either only females are responsible for determining the sex of a baby child or God decides. 95.2 per cent of respondents think there must be a scientific reason behind the changes taking place in them during this stage of life, but nobody actually knew the correct reason. 92.9 per cent respondents have never learnt any scientific concept through dance and music. 97.6 per cent respondents think that nature cannot be used as an example to observe and understand changes taking place in the human body or the living world.

Learners' perception of the adolescent stage and issues (post-intervention results)

The change in learners' perception of the adolescent stage after watching the programme is mentioned in Table 2.

Table-2: Learners' perception of the adolescence after watching the programme

S.No.	Statement	Percentage of respondents agreed with the statement
1.	Changes in adolescence are natural and universal.	94.1%
2.	Changes in adolescence are manageable.	80%
3.	Changes in adolescence need to be shared with right person.	96.4%
4.	Accept the period of adolescence as a challenge and handle it calmly.	96.4%
5.	The adolescence stage is not a disease.	94.1%
6.	Body undergoes changes due to secretion of hormones during adolescence.	97.6%
7.	The time of appearance of such changes may vary from person to person.	63.5%
10.	All changes in an individual do not happen at once, they appear with progression of time.	95.2%
11.	Personal hygiene is important for healthy growth.	96.4%
12.	Physical exercise is important for health.	98.8%
13.	Boys and girls both should take care of sexual hygiene.	91.7%
14.	Prefer eating fast food in place of junk food.	80%
15.	A Balanced diet is essential for a healthy body and mind.	97.6%
16.	Dieting options are not useful for the body.	56.4%
17.	It is not correct to blame only the mother for a girl child.	98.8%
18.	Male and female both are responsible for determining sex of a baby child.	75.2%
19.	God do not determine the sex of a baby child.	91.7%

Teachers' perception about adolescent stage and issues (pre-intervention results)

They deal with issues related to adolescent learners by classroom discussion (91.6 per cent), one-to-one counselling (58.3 per cent), counselling parents (16.6 per cent) and using technology (58.3 per cent). The most common pedagogical practice used by the teachers to transact the chapter "Reaching the Age of Adolescence" was the lecture method which would explain adolescence through an exclusively educational programme. Teachers knew both father and mother are responsible for determining the sex of a baby child. They have never taught any scientific concept through dance and music to children. All the respondents said that nature can be used as an example for teaching about changes in the human body or living world. Growth is a natural phenomenon taking place in all living organisms. In nature we have plants which undergo changes when they enter the reproductive phase.

Teachers' perception about adolescent stage and issues (post-intervention results)

All the teachers said that the programme can bring awareness on issues related to adolescence as it indicates that adolescence is accompanied with varied changes which can be handled calmly. The programme is helpful to break various myths prevailing in the society. The programme clearly defines gender identity. To explain the concept of adolescence through this video programme, is very easy and helpful for teachers. The interviews with doctors and teachers clarify many doubts. The presentation of scientific concepts through dance and music was appropriate and relevant.

Discussion

The present research study on audio-video programme "*Kishorawastha Ki Aur*" showed a significant impact on developing understanding among learners about adolescents. The learners' and teachers' responses indicate that the programme is helpful in bringing awareness on issues related to adolescence and how to deal with them. They realised that adolescent stage is not a disease; it is natural, universal and accompanied with physical, behavioural and social changes. After watching the programme, they came to know the correct scientific reason behind such changes i.e. secretion of hormones in their body which happens during adolescent stage. All the changes in an individual do not happen at once, they appear with progression of time. Majority of the learners' irrespective of the gender wanted to share their issues with mother and their friends, which indicates a strong and comfortable bond with them. It was found that learners might have tried to talk with their parents regarding their problems they face during adolescence as it was totally new to them but have rarely received the support and concern from them. As a result, the majority of the learners wanted change in their parent's behaviour and sought support when they discussed their issues with them. They wanted parents to create a friendly environment where they patiently listen to their problems and respond positively (Branje, 2018). They understood that changes at this stage may be a taken as challenge but can be handled calmly with a right approach. This may be done by sharing with parents, teachers or counsellors which indicate that communication is very important rather than not communicating or searching answers through non-reliable sources like the internet, social media, etc. The programme was found also helpful to break various myths and taboos which

are still prevailing in our society even in the 21st century such as God does not determine the sex of a baby child. The sex of a baby child is determined by sex chromosomes (XX in females and XY in males) present in mother and father. Mother alone should not be blamed for a girl child. Both father and mother are responsible for determining the sex of a baby child. The programme was also beneficial in breaking myths related to menstruation such as girls during menstruation cannot enter the kitchen and cannot play sports (Garg & Anand, 2015). The programme resolved the misunderstanding on the difference between fast food and junk food. During this stage, eating habits also change, thus it is important to focus on health by doing exercise regularly, avoiding dieting and eating a balanced diet and preferring fast food like nuts, fruits, etc. instead of junk food like chips, pizza, soft drinks, etc. Both personal and sexual hygiene are important for boys and girls for healthy growth. The learners and teachers could relate how nature can be used as an example to observe and understand changes taking place in the human body or the living world. Growth is a natural phenomenon taking place in all living organisms. In nature, we have plants which undergo changes when they enter the reproductive phase. For the first time they have learnt any scientific concept through dance and music. Everyone enjoyed watching the programme and understood new and relevant ways to present a scientific concept through fusion of art, music and dance (Marshall, 2014). However, they suggested using contemporary dance form in place of classical form. This clearly indicates the declining interest of youth for our cultural heritage which needs special attention to work upon. It was demanded to add more interviews in the programme which would help in clearing more doubts regarding adolescence. Both teachers and students found the developed

programme beneficial. Teachers appreciated the topic of the programme as it requires a lot of attention nowadays and the way it was presented.

Conclusion

The programme was beneficial in creating awareness about how to deal with the issues related with adolescence and the reasons for the changes and how to discuss such issues without any hesitation in a conducive environment. The programme with the help of art forms like dance, music and puppetry developed a new pedagogy to explain scientific concepts. The programme also emphasized the vital role of parents and teachers in adolescent's life as a strong support system. The programme also helped in breaking various myths prevalent in the society which misguides an adolescent.

Thus, this study established an example to deal with adolescent related issues by integrating nature and art forms with scientific concepts. This may be useful to deal with the issues and concerns related to this particular age at emotional, psychological and mental level. Prevailing mindset in society may be worked upon by creating awareness among children as they are going to become the pioneers of future generations. Hence, this programme may be utilized as an educational tool to reshape the thinking process and behavioural patterns in the present society.

The programme has been uploaded on NCERT officials you tube channel for wider dissemination and use.

This was an experimental study to explore new ways of learning focusing on integrated approaches. Similar strategies may also be adopted in different areas to step up towards holistic development of a child by addressing his/her various developmental aspects.

Declarations:

Competing interests: The authors declare there is no competing interest.

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