

Steiner Based Education and Mainstream Schools

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Abstract— Rudolf Steiner was a visionary of education in the early 20th Century. He was not only the founder of anthroposophy but the creator of the Waldorf/Steiner education system. This system began with a school for factory workers and has turned into a holistic approach to educating a child from early childhood until adult years. It has recently gained popularity as it encompasses an alternative pedagogical approach than that currently on offer, the one size fits all system, as it focuses on individualised learning, a holistic education emphasising connection to nature and to self, in learning about oneself and how one's self learns best.

The research has shown for some time that the standardised approach to the current mainstream education system, in Australia in particular, does not necessarily benefit children's education, a need for an overhaul of the system and the curriculum is prominent. Using a Steiner based approach in mainstream schools will be beneficial for all students for a multitude of reasons.

One of the key themes behind Steiner education is the emphasis on a holistic approach to learning. Whilst the modern mainstream curriculum incorporates almost the same areas of development, it is performed in a standardised manner that often leaves students behind, does not support those who are ahead and does not include all students. This mainstream education approach prioritises academic achievement, rote learning and standardised testing, which research has shown has many negative implications such as anxiety and depression showing up in young children. Steiner based education, whilst working on similar subject areas, emphasises the importance of nurturing the child in a physical, mental and emotional sense whilst simultaneously adding academic and creative learning into the daily routine. The Steiner education system aims to teach all students at the level they are at, in a way that they can best learn and to not focus entirely on academic success. It also ensures that students are emotionally and socially competent at the completion of their schooling.

Index Terms—Holistic education, Steiner based education, creative education, real life application

I. INTRODUCTION

Individualised learning is a key theme in Steiner based education, as this education system places a strong emphasis on individualised learning plans and working with the student on the level that they are at, rather than a standardised approach (Baldwin, 2017). This pedagogical approach recognises that each student not only has different learning styles but also has different interests, strengths and areas that need improvement, therefore this personalised and individual learning approach is needed to cater to each student's needs in order to help them succeed academically, socially and emotionally. This educational approach helps students to develop a sense of pride and ownership over their own learning, with Steiner based education having an emphasis on student lead learning, this in turn leads to increased motivation to learn and engagement within the classroom (Gilliland & Dunn, 2003).

Steiner based education has many key benefits on its own but by incorporating the pedagogical approach into mainstream schools it can help to focus on hands-on and experience based learning. Steiner based education focuses on practical and real life learning experiences, rather than the mainstream approach of rote memorization and passive listening in a standardised learning approach. By engaging students in meaningful hands-on activities such as gardening, cooking and real life activities, Steiner based education can be implemented in any mainstream school to foster creativity, individuality, critical thinking and problem solving skills in a hands-on manner (Kieran & Lee, 2015).

A strong sense of community and social responsibility within the world is promoted in Steiner based education and encourages collaboration with peers and teachers. This approach encourages real life lessons such as team work, empathy and respect, as well as understanding diversity and inclusivity. By instilling these values as well as compassion, environmental awareness and care and understanding of world issues from a young age, Steiner

based education helps to prepare students for real world situations as opposed to mainstream education which focuses heavily on academics, particularly in literacy and numeracy. Whilst these skills are vital, the mainstream approach to education overly emphasises these areas and lacks real world application (Erikson, 1963).

Nurturing the creative side of the brain is a key area of emphasis in Steiner based education, which is often lacking in mainstream schools due to the over emphasis on literacy and numeracy. This approach recognises that nurturing the students creative brain assists in other learning areas such as literacy and numeracy, as it allows the student to use multiple learning methods. Imagination and appreciation for aesthetics, which is often neglected in mainstream schools, is a key focus that allows students to have a holistic education in areas such as music, drama, art and storytelling. This provides students with a well rounded education that encourages creativity but still focuses on literacy and numeracy, as these areas are artistically incorporated into learning (Hetland & Winner, 2001)

By incorporating Steiner based education into mainstream schools, this pedagogical approach can offer valuable methods in teaching and education that prioritises the individual student, a holistic approach to development and embraces an enriching and engaging learning environment that prepares students to thrive in the modern day world.

PART ONE: WHAT IS STEINER BASED EDUCATION

II. INDIVIDUALISED LEARNING

Steiner education, also known as Waldorf education, is a pedagogical approach to learning that emphasises a holistic, child centred, individualised learning approach to education, with engagement in hands on activities that also promotes collaboration with peers and teachers and emphasises supporting the child at the level that they are at (Hutton, 2014). This system of learning was developed in the early 20th century with the key focus being that students are unique individuals and that they should have an education that reflects this. The thought behind this pedagogical approach is that each child is unique and should have an education that reflects their strengths whilst educating the child as a whole - both mind, body and spirit (Baldwin, 2017).

One of the key principles behind this pedagogical approach is a focus on individualised learning. In a Steiner classroom, teachers work closer with each student than in a mainstream classroom to fully understand the students interests and dislikes as well as strengths and areas that need improvement. The lessons are then tailored to meet these interests, abilities and different learning styles to ensure that each student's needs are being met to provide a well rounded education. This individualised approach ensures that each student can progress at the speed and ability that they need to, which promotes a sense of confidence and self achievement.

The Steiner based education system, unlike mainstream education which focuses on standardised testing and a standardised curriculum, recognises that each student is an individual that develops all areas at their own pace and has different interests and needs. The emphasis of individualised instruction helps to create a supportive and nurturing environment in which all students can thrive in all areas of academics and arts as well as social skills and emotional skills.

Another of the key aspects in Steiner based education is a focus on hands-on learning. A Steiner based classroom is designed to gently stimulate the senses and engage students in meaningful learning. The lessons themselves often involve artistic methods of learning such as painting, drawing and music that incorporate the key learning areas of literacy and numeracy to offer a tactile approach to learning (Hetland & Winner, 2001). These hands-on learning experiences help students to connect to both the resources and the material deeply and in a meaningful way, as opposed to a rote learning approach that is present in the mainstream education system.

Steiner based education encourages students to be actively involved in their learning through creative expression and collaboration, with both teachers and peers, to ensure that the learning is individualised and focuses on the strengths of each student (Gilliland & Dunn, 2003). This engagement in learning helps to promote a deeper understanding of the material and resources that will help foster a positive relationship with learning.

There are numerous benefits to this pedagogical approach to learning. It is the tailored instruction and meeting students at their level that provides an environment that is supportive and nurturing so students can succeed not only academically but also emotionally and socially. This personalised approach to learning offers students the

opportunity to develop a strong sense of confidence and self esteem, as they are engaged in their interests within the classroom and strengths and talents are emphasised rather than their areas for improvement (Baldwin, 2017). This pedagogical approach to learning takes a holistic approach to education and recognises that academic success is just one area of a students development. It teaches a vast array of subject areas such as arts, music and practical skills that allow students to find their areas of strength, nurture the student as a whole and promote a well rounded education that nurtures creativity, imagination and critical thinking (Hetland & Winner, 2001). Steiner education has an emphasis on social and emotional development which promotes community connection, collaboration within the classroom between the teachers and the students as well as parents and communities and teaches empathy and understanding amongst the students (Gilliland & Dunn, 2003). It is within the Steiner schools that students greatly develop a strong sense of social and emotional skills and a sense of responsibility towards themselves and others.

Overall, Steiner based education offers a unique and effective approach to teaching in an individualised manner that recognises that each student has different needs and abilities. It is within Steiner education that these needs and individualised learning can be done, as this pedagogical approach offers engaging, self selected learning activities that emphasis the student as a unique individual, focuses on a holistic education, in that it offers more areas of focus than a mainstream school which emphasises rote learning of literacy and numeracy skills and offers a supportive environment that allows students to thrive not only academically, but emotionally and socially as well. There are clear benefits as to why Steiner based education should be incorporated into mainstream schools such as helping students to achieve their full potential with individual learning and greater development of social and emotional skills.

III. HANDS ON PRACTICAL LEARNING

Another key feature of Steiner classrooms is the presence of practical activities and hands-on learning opportunities. Students engage in a wide range of practical activities, such as gardening, woodworking, cooking, and handwork, that help them develop valuable skills and abilities (Baldwin, 2017). These hands-on experiences not only promote a sense of mastery and accomplishment but also help students connect with the materials in a meaningful way and deepen their understanding of academic concepts (Hetland & Winner, 2001).

The use of practical and hands-on activities in Steiner education is based on the belief that learning is most effective when it is connected to real-world experiences (Henson, 2005). By engaging in practical tasks and meaningful activities, students are able to apply their knowledge and skills in a practical context, making learning more relevant and engaging.

Steiner based education offers a greater emphasis on hands-on learning, as opposed to traditional mainstream learning which offers a textbook approach to learning (Gilliland & Dunn, 2003). Steiner education is more child centred than mainstream education and it has a greater emphasis on tactile learning, often including nature based resources, that stimulate the senses (Baldwin, 2017). Mainstream education relies on standardised testing and rote learning with worksheets, textbooks and workbooks, this is not seen at all in Steiner education as it offers a unique teaching method that emphasises experiential learning, tactile learning resources, natural resources and practical development skills for real world, life long skills. This type of learning encourages children's creativity, critical thinking and social emotional development.

Steiner classrooms are designed to be warm and inviting for both the students and the teachers. Unlike mainstream classrooms that are cluttered with books, no space on the walls and sterile learning environments, Steiner classrooms offer a unique set up in that they still contain chalkboards, often have circles of desks rather than lines and have warm and light colour schemes (Baldwin, 2017). These classrooms in themselves promote a sense of community and collaboration amongst the students and the teacher in not only the environment but also the work that is completed.

The materials within the classroom emphasise the hands-on approach to learning, items such as wooden desks, beeswax crayons and natural fibres such as wool are to be found in a Steiner classroom and offer a sensory stimulation in a positive manner (Baldwin, 2017). This approach encourages hands-on exploration and tactile sensory learning. Having this focus on natural, warm environments nourishes the students' senses and allows them

to connect with not only the learning environment within the classroom but also encourages them to have a connection with the outer world and environment.

The Steiner classroom emphasises the use of natural materials in its hands-on learning approach and therefore, unlike mainstream schooling, does not rely on textbooks, work books or lectures to teach. The teachers in this setting use a variety of tactile, artistic and practical materials from the real world to help students to engage with their learning in an active way, as opposed to mainstream education which is often passive learning (Baldwin, 2017). These materials help students to explore not only the world around them but they allow the student to explore and understand themselves and how they learn from a young age.

Several of the items in a Steiner classroom have shown that they aid in the development of the child not only academically but also their creativity and social skills (Baldwin, 2017). Items such as handmade dolls offer children the experience of caring for small children in play which leads to the development of nurturing and caregiving skills (Hart, 2010). Another key to play in the Steiner classroom is the use of open ended toys. Open-ended toys have been shown to encourage creativity and promote problem solving skills as they allow children to make their own choices and use their imagination (Kress, 2002). Wooden toys are another emphasis in the Steiner classroom which have also demonstrated the ability to teach children spatial awareness, fine motor skills and hand eye coordination (Katz & Chard, 2008). These materials in the Steiner classroom are often surrounded by other natural materials such as wool, feathers and stones that encourage open ended play, real world application and exploration of both the world and the child.

Overall, the setup of Steiner classrooms and the use of materials and resources that support hands-on, practical learning set Steiner education apart from traditional mainstream education. By providing students with a rich and engaging learning environment that fosters creativity, critical thinking, and social-emotional development, Steiner education offers a unique and effective approach to education that prepares students for success in both academic and real-life settings (Katz & Chard, 2008).

IV. REAL LIFE APPLICATION

Steiner based education has been noted for its unique approach to learning that helps students develop skills for the real world. Mainstream education has often been criticised for its emphasis on standardised testing that leads to the lack of application and adaptability in the real world.

Students who have a Steiner based education have more accessibility to activities such as cooking and gardening which not only help to develop problem solving skills, resourcefulness and creativity but they also apply to real situations, as opposed to mainstream education which often focuses on theoretical knowledge and abstract concepts that lead students unprepared into the real world.

One of the key differences between Steiner based education and mainstream education is the emphasis on technology. This is majorly because of the advancements in technology that have occurred after Steiners time, but also because the skills taught in Steiner based education focus on fine motor skills, spatial awareness and creativity rather than technology based mainstream education.

Social skills are another crucial skill that is emphasised in Steiner education, which encourages empathy, cooperation and conflict resolution that is often self initiated. Students often work in small groups to share ideas and work on tasks, which correlates to real world employment situations. This is a contrast to mainstream education where the focus is on self achievement, competition and predesignated tasks that offer little social and collaboration skills.

Environmental sustainability is emphasised in Steiner based education and students are encouraged to garden, cook and use resources sustainably. These skills, whilst from Steiners time, are even more applicable in today's modern world with dwindling resources and climate change. The Environmental Protection Agency has found that students who have had a Steiner based education have a higher level of environmental awareness and are more likely to understand and care about real world environmental issues (EPA, 2018).

Steiner schools also emphasise the importance of social responsibility and encourage students to think critically and solve problems surrounding real world issues. These skills are essential for addressing issues like poverty, inequality and discrimination. An example of this includes the National Center for Education Statistics findings that "students who attended Steiner based school were more likely to participate in community service and

volunteer work compared to those in mainstream schools” (NCES, 2015).

Research has also shown that students who attend Steiner based education facilities perform better academically, have higher levels of creativity and greater self motivation than those in a mainstream education system (Küttel, 2013).

V. NURTURING THE CREATIVE BRAIN

Steiner based education is well known for its emphasis on nurturing the creative brain (Rudolph, 2006). The philosophy in itself emphasises the development of the whole child which includes their intellectual, artistic and practical ability, by using a curriculum that supports and encourages creativity, imagination and innovation (Mason, 2009). Unlike mainstream education, Steiner based education offers the basis that creativity is a fundamental part of human nature and it is essential for an individual to develop their creative skills not only to enjoy their education but also to actively engage with the world around them with a unique mind (Kuhlenbeck, 2015).

One of the unique ways that Steiner based education nurtures the creative brain is through the emphasis on imaginative play. Steiner based education begins around the age of 3 and encourages the use of puppets, dolls, props, wooden toys and natural materials to create stories and scenarios that encourage imagination. This type of play has been shown to develop critical thinking, problem solving skills and use divergent thinking (Küttel, 2013). Imaginative play has also been shown to develop social skills in working together with resources, making stories and sharing as well as co-operation, empathy and communication both within the children and their stories (Hügel, 2006).

Another method that Steiner based education uses to nurture the creative mind is the use of rhythm and routines that includes “hands off free play time” (Hart, 2008). Whilst this occurs mostly in Early Childhood (ages 2-6 in Steiner based education) this then feeds into the grades in later schooling when children are able to choose their own learning projects and areas that they work on (Kuhlenbeck, 2015). Steiner based education follows a loose rhythm, similar to mainstream education, in that it starts the day with a group gathering, a morning lesson on an academic area such as mathematics and then allows children choice of play or work, followed by a creative lesson in the afternoon. This is similar to mainstream education in that mainstream schools often offer an academic lesson first in the morning followed by a short break. The difference being that they may have another academic lesson after the short break which does not allow the creative mind to work in the latter half of the day when the child may be tired. Having the rhythm that Steiner based education does, allows all aspects of the child's brain to be nourished and to develop (Mason, 2009)

Similarly, Steiner based education offers a greater opportunity of artistic expression. Mainstream schools often only have a short session on the Arts per week, whereas in Steiner education artistic expression is emphasised both as a separate lesson and embedded in most lessons, including academic lessons like mathematics. Using skills such as drawing, painting and movement throughout the day, rather than a set lesson once a week, children can develop their creative skills, visual thinking and spatial awareness and fine motor skills (Larkin & Harris, 2006). This emphasis on artistic expression offers children the opportunity to develop their emotional intelligence, self awareness and self regulation as it encourages freedom of choice and self identity (Goleman, 1995).

Whilst mainstream schools emphasise literacy, reading and writing, Steiner based education offers this Key Learning Area in a different manner. Children are encouraged to engage in their storytelling activities with hands-on storytelling such as puppet shows and oral storytelling, where the emphasis for literacy in mainstream schools often depends on the teacher reading from a book and students may complete a comprehension worksheet on the story. The use of puppet shows and oral storytelling in Steiner education has shown to increase and develop creative thinking, sequencing, cause and effect thinking and logical reasoning skills (Küttel, 2013). This type of storytelling also helps to develop social skills, cooperation and communication as it is often undertaken in a group setting as opposed to story book reading which is often a singular learning activity. (Hügel, 2006).

Steiner based education provides a unique hands on approach to nurturing the creative brain in the classroom. With its emphasis on imaginative play, hands-on storytelling and community and social responsibilities, Steiner based education helps children to develop both creative, social and academic skills that allow them to fully engage in the world around them (Hart, 2008). These skills are essential for being able to fully engage in the modern

world with its social and environmental issues and to be able to make meaningful contributions to personal and professional relationships (Mason, 2009), (Kuhlenbeck, 2015) & (Rudolph, 2006).

PART TWO: HOW CAN MAINSTREAM SCHOOLS INCORPORATE STEINER BASED EDUCATION

VI. HOW TO INCORPORATE STEINER BASED EDUCATION INTO MAINSTREAM SCHOOLS

Steiner based education schools often have an association with exclusivity, high tuition fees and limited access geographically (Rudolph, 2006). By incorporating Steiner based education into mainstream schools, it can offer a holistic approach to education that can be accessed by the majority rather than a minority. Mainstream schools can adopt the Steiner based education principles and practices to enhance their curriculum by making incremental, low cost changes over time (Hart, 2008).

A key concern about incorporating Steiner based education resources and curriculum into mainstream schools is the financial cost of resources and materials (Mason, 2009). Many mainstream schools lack funding to be able to do this immediately if not at all, but by simply incorporating the principles of nature based, hands-on learning into mainstream schools, all schools can start to implement Steiner based education into their learning (Rudolph, 2006). Small investments over time to upgrade resources as they are used such as incorporating beeswax crayons when crayons need to be replaced, incorporating objects from nature such as leaves and twigs which are readily available in most areas and introducing handwork with wool and hand sewing equipment are small, affordable ways of including Steiner based education into mainstream schools (Hart, 2008). Incorporating Steiner based education into mainstream schools can be a relatively easy process as it can involve adapting existing practices and upgrading materials over time as they are needed (Kuhlenbeck, 2015).

Steiner based education emphasises the use of natural materials in both resources for learning such as handwork as well as creative play (Mason, 2009). Toys are often made from wood, natural fibres and wax to provide a natural, hands-on, sensory experience for small children right up to the high school years where this equipment is still used in hand work and learning (Hart, 2008). When purchased, these toys are often expensive, however classrooms could make some of their own toys or resources such as doll houses, candles and crayons as not only part of their classroom but to help with their learning in these areas (Kuhlenbeck, 2015). Simple tools and resources to make these items such as sewing equipment, wool, silk and wood are all easily accessible in most places and older students could help younger grades to make toys and objects from these resources. This method will also include multiple mainstream curriculum outcomes such as connecting with the world around the student, mathematics with budgeting, buying and sourcing materials and other practical hands-on skills that correlate to the real world (Rudolph, 2006).

Incorporating Steiner based education into mainstream schools should be a relatively easy and a fun process that includes both teachers and students by emphasising children's interests such as project based learning, including daily opportunities for hands on learning through art (including handwork), music and movement and encouraging social interactions through group activities and projects occasionally to promote teamwork and social skills (Kisner, 2001) & (Kaplan, 1995).

The benefits of incorporating Steiner based education into mainstream schools can have numerous benefits for students including: enhanced creativity skills, self expression and physical movement, improved critical thinking skills, hands on learning experiences and problem solving (Kisner, 2001). Whilst mainstream schooling emphasises academic performance more so than Steiner based education, studies have shown that Steiner based education can improve academic performance in the key learning areas such as mathematics and literacy (Lillard, 2013). Social skills and teamwork are another key emphasis in Steiner based education that promote social interactions through group work and collaboration (Kaplan, 1995). Similarly, Steiner based education emphasises emotional intelligence by encouraging self awareness and regulation that allow students to not only understand how the human mind interacts with the world around them and the actions of others but also how their own mind works (Goleman, 1995).

Whilst Steiner based education can often be seen as exclusive, expensive and non-academic, there are many easy ways to incorporate the practices and principles of Steiner based education into mainstream schools that are accessible and affordable but that also benefits both teachers and students in academic and non academic learning.

Steiner based education offers a holistic approach to learning and development of the child that encourages students to think critically, work with peers and offers hands-on learning experiences that benefit not only academic minds but creativity and social skills as well. By incorporating Steiner based education into mainstream schools, teachers can promote this holistic learning that provides students with unique learning experiences that nourish them as a whole person and create an accessible way of achieving a Steiner based education.

VII. CONCLUSION

In conclusion, the ease of incorporating Steiner Based Education into mainstream schools can have not only a positive effect on creative learning but just as importantly, academic learning (Hart, 2008). Steiner based education emphasises individualised learning which can easily be incorporated into mainstream schools by providing hands on practical activities, project based learning with an emphasis on group work and providing students with natural resources, Steiner based education is easily incorporated into mainstream schools to offer a well rounded, holistic education that nurtures creativity, imagination and academic thinking (Mason, 2009) & (Rudolph, 2006).

It is with the individualised approach to learning, that Steiner based education offers the opportunity for teachers to adapt their instruction and teaching to the unique needs of the students, rather than the standardised testing approach that is currently offered in mainstream schooling (Kuhlenbeck, 2015). This approach allows students to be fully supported in a nurturing environment to reach their full academic, social and emotional development as well as giving students a sense of confidence and self esteem in their learning and within themselves (Hart, 2008). The use of hands-on learning and real life applications provides students with the opportunity to engage in truly meaningful and relevant learning which allows them to grasp academic concepts in a deeper way (Mason, 2009). Steiner based education has a strong emphasis on the development and understanding of the self, this encourages students to understand and connect with their own styles of learning and interests in learning whilst developing key emotional and social skills such as empathy and social responsibility (Rudolph, 2006). This approach to learning shows that academic performance is not the only area of learning that needs to be taught and understood within any schooling system and that students need to be nurtured as a whole rather than purely academics.

Steiner based education, unlike mainstream education which focuses and relies on standardised testing and rote learning, which leads to lack of engagement and motivation in students, offers a unique approach to teaching literacy and numeracy skills which does not neglect other areas of development and learning (Kuhlenbeck, 2015). By incorporating Steiner based education into mainstream school, teachers can provide students with a holistic education that prepares them for the real world and success in all areas in their life including academics, social and workforce (Rudolph, 2006). This approach to learning helps to nourish the creative brain, the child as a whole and encourages holistic learning that provides students with skills and confidence to participate in a world that is rapidly changing. By offering an approach that emphasises experiential learning, tactile learning and the use of natural resources with open ended toys, hand made items and natural resource tools, the Steiner classroom offers students the opportunity to learn through play and exploration which is essential for cognitive, emotional and social development.

In conclusion, the inclusion of steiner based education is not only easy to achieve, in both time and financial means, but it also has a highly positive impact on students and their learning by emphasising an individualised approach to learning with hands on, real life, practical activities and an academic balance. Steiner based education can easily be incorporated into mainstream schools by teachers and students to offer students a well rounded, holistic education that offers students the opportunity to prepare for success in all areas of their life.

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