**Introduction**

This curriculum framework is a brief statement that provides the foundational worldview from which an Adventist teacher delivers the Australian National Curriculum. It is a concise statement of principles, values and threads that undergird and guide what we consider to be real, true and good. This worldview is shaped and permeated with our belief that Jesus is “the Way, the Truth, and the Life.” John 14:6.

We also believe strongly that each teacher must teach from within their own authentic Christian journey and that their experiential relationship with Jesus will permeate all they say and do. This framework endorses the notion that rather than being Christians who happen to teach, we are wanting to teach Christianly. We wish to reveal a God who loves unconditionally.

“To think Christianly is to accept all things with the mind as related, directly or indirectly, to man’s eternal destiny as the redeemed and chosen child of God.” Harry Blamires, ***The Christian Mind: How Should a Christian Think?*** *,* p. 44

Teaching is more than imparting information. Effective Christian teaching is transformational. It will take Romans 12:1-2 as its focus and try to nurture a discipleship response to God’s love in the lives of our students. This provides the basis for the term “threads” used in the Values and Action Response sections. ‘Threads’ are simply the qualities or characteristics we desire as responses from our students. They help provide cohesion and linkage to everyday living. These Action Responses, like Values, will often overlap in various subject areas, and provide a discipleship response to God’s love.

The document is intended to be practical and succinct with a clear focus on the transforming role that the Adventist teacher can play in the lives of their students. It contains:

* A challenge to maximise the transforming teachable moments.
* An overview Adventist curriculum statement.
* A subject-specific rationale followed by the objectives for that KLA.
* A section focused on just how values and action responses, with appropriate essential questions, can challenge the teacher to maximise an Adventist worldview and seek transformational experiences for their students.
* Three pro forma options for developing units with an embedded Adventist worldview.
* Sample units – for both primary and secondary – that illustrate this.
* The Transformational Teaching documents are designed to assist teachers in being intentional in including an Adventist Worldview in their Learning Areas. The suggestions included in each framework can also support teachers in achieving the following **Adventist Identity Teaching Standards** (Supplement to the AITSL National Professional Standards for Teachers). Further elaborations of these standards can be obtained from your principal or your Director of Education. They can also be found on the ASA website <http://asa.adventist.edu.au>

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| **Adventist Identity Teaching Standards** | **Proficient Standard** |
| 1.7 Understand how students learn about God | Design and implement teaching programs to promote and support students’ learning about God. |
| 2.6 Knowledge of the content of the Bible and its teachings | Use effective teaching strategies to integrate Bible stories and themes into specific content in appropriate and meaningful ways. |
| 2.7 Reflect an Adventist Worldview | Understand and differentiate the various worldviews to integrate a genuine Adventist Christian Worldview into classroom and school activities. |
| 3.8 Integrate Faith and Learning | Plan and implement effective strategies for the integration of Faith and Learning to engage students in their learning about God. |

**A Challenge**

While these curriculum documents have been put forth as suggestions of how topics of faith, God, and values might be interwoven into Design and Technologies classes, anecdotal research indicates that when people are asked about their “best" teacher, by far the most influential aspects for 70-80% of responses relate to the kind of person the teacher was, and how his/her personal faith and experience with God was talked about, lived, modelled and shared with students. This idea is backed by one Valuegenesis report that recommends that since young people are wanting a deeper personal relationship with God, “church leaders need to consistently model life lived in relationship to God, and teach that religion is basically a matter of relationships with God and fellow humans rather than a system of beliefs or a code of behaviour.” More recently the current generation’s desire for authenticity, wants to know how this God thing works and to see how it is lived out in everyday life.

**Examples of Powerful and Transforming Teachable Moments**

**In STORIES, teachers share ways that God works and is at work through…**

1. Object lessons, metaphors, word pictures, illustrations
2. Teachers or students provide own personal stories involving understandings of God, His intervention, His answers…
3. Teacher exemplifies values in his/her own life which students might model – e.g., patience, perseverance, joy of learning, humility, wonder of God’s ways , fairness, equity, mercy, and grace for the challenging students.

**In FAITH EXPERIENCES in which…**

1. Teachers and students have opportunity to share aspects of their personal walk with God with each other (e.g. sharing with a student how God had directed your thinking in certain ways).
2. Students and teachers explore ways of building relationships with other people through community work, cooperation and service.
3. Class activities/assignments that include opportunities for students to communicate God’s message through writing, speaking, audio-visual presentations and other appropriate ways.

I**n the SCHOOL SETTING,** **opportunities to acknowledge God exist in…**

1. What is written in words, official policies, documents, newsletters, and signage.
2. What is visually displayed in terms of bulletin boards, displays, neat and tidy classrooms without rubbish on the floor, manicured lawns and gardens, large posters with a Bible text, inspirational quotation …etc.
3. The ‘hidden curriculum’ – what is ‘felt’ when one comes into the school – warmth, belonging, sharing; how discipline and deviant issues are solved, a caring community that looks out for each other and rallies around in disaster and need…

**Curriculum in an Adventist School**

This statement represents the heart of Adventist Curriculum in Australia, providing a context and orientation for the learning areas that make up the full curriculum.

Seventh-day Adventist education begins with recognition of the eternal, loving and personal God who has always existed, is all powerful, and is the source of all life, truth, beauty and what is of value. It is based on the premise that God has provided insights into His character and what He has created. It believes that as created beings, humans are dependent on God for such insights in order to know how to grow, function and develop in keeping with His ideal for mankind. This need is because of humanity’s separation from God through sin, and God’s initiative in re-establishing a relationship with humanity through the coming of Jesus Christ, the perfect expression of what God is like.

Adventists believe that humans were created by God to be perfect and in His image, but people exercised their God-given powers of choice and rebelled against God. Mankind is now naturally depraved, dependent on the divine initiative of God for salvation and the restoration of former God-man relationships. Mankind’s true value is only found in his relationship with God and not in isolation from Him. This view asserts that an infinite God, through Christ, created this world as part of a perfect Universe which He continues to sustain by His power, through the law He has ordained. Although created perfect in God’s likeness, humanity’s free choice led to alienation from the Creator. This broken relationship resulted in a fallen nature out of harmony with God, and a blighted creation. Through His infinite love, God instituted a plan of salvation through the life, death and resurrection of His Son, Jesus Christ. This plan provides for the restoration of a harmonious relationship between humanity and the Creator, and gives hope of eternal life.

The curriculum in Adventist schools is seen as contributing to the restoration process towards God’s ideal. It is, therefore, a needs-based curriculum, covering a range of knowledge, skills, attitudes, behaviours and values through teaching and learning experiences designed to facilitate holistic development – spiritually, mentally, physically, emotionally, creatively and socially. It endeavours to provide this foundation through a comprehensive range of *learning areas*. These learning areas (or LAs) represent the various *facets* of God’s creation, how each aspect functions, and how created elements within them interrelate. Although they stand with their own distinctive form and character, and may be studied as such, they also allow for integration with one another, thus acknowledging holism in God’s created order. These learning areas, therefore, are like ‘windows’ in two senses – windows through which students may gain views of God’s character and action, and windows of opportunity to respond to God in ways that reflect His character and the values that are part of His Kingdom.

God’s design for enjoyment of a full and abundant life is realised in acceptance of His laws and values as revealed in the unselfish life of Christ and is expressed in His teachings. These values impact on all people’s cultural activities and reflect their relationship with God, other people and the natural world entrusted to their care as well as providing a foundation for an eternal life lived in God’s presence. Related aesthetic values shape their appreciation of beauty and creativity. From this perspective, the development of Christian faith pervades all of life, so every activity within every learning area has spiritual significance.

**The Purpose of Teaching and Learning Design and Technologies in an Adventist School**

God is the Creator, the Designer. What He designs is ‘good’. What He made was ‘very good’. He made man in His own image. Man was given free will, essential to also be a designer. He gave man the brief to ‘dress and keep’ the Garden of Eden. Adam and Eve chose to eat from the tree of Knowledge of Good and Evil. The perfect order and harmony was broken.

After the fall and separation between God and Man, man realised that it was possible to use Design and Technologies for evil intentions that damage our environment, our society and individuals. God uses Design and Technologies to address the problems.

The purpose of education in an Adventist Christian school is to restore the image of God to the heart of man. Technologies are morally neutral until we apply them [1]. During Design and Technologies classes, students are encouraged to allow God in their hearts. The result is selflessness, prudent-management and the discerning use of techniques and design to communicate God’s character, and service to benefit humanity.

The creative medium of the various fields of Design and Technologies allows students to more easily fulfil God’s intended purpose for them. As students create and use their physical and mental faculties to analyse and solve problems, they can learn and sympathise with others. Through their labours students may find many opportunities to receive object lessons and be guided to learn from the Master Teacher Himself. God uses difficulties to train His children (Romans 5:3-5). The journey of the student through Design and Technologies disciplines inherently causes them to face difficulties, to persevere and gain experience. This Christ-like character fits students to look forward in hope to the restoration of things to a good state again.

**Design and Technologies Objectives**

The study of **­Design and Technologies** in a Seventh-day Adventist school will…

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| **\*The Four Lenses** | **Creation** | **The Fall** | **Redemption** | **Restoration** |
| **The Symbol** |  |  |  |  |
| **The Focus** | **Purpose** | **Problem** | **Response** | **Hope** |
| **The Descriptor** | *The meaning of a particular learning concept and God’s purpose.* | *What went wrong because of rebellion?* | *How to respond, using learning for God’s purpose in everyday life.* | *Points to the future when “all will be made new”*  *i.e. present actions being shaped by the future ideal.* |
| **Design and Technologies**  **Objectives** | Help students realize that every human being, made in the image of God, has innate creativity.  Since creation, God has enabled people to create and use technology for their advantage and pleasure. | Promote understanding that technology is neither good nor evil, but the way it is used will lead to blessing or judgement. Technologies can be used for purposes that are selfish and divisive. The application of technological tools can contribute to falsehood and distortion in our world. | Create awareness that technology itself can never be the means of salvation but can be used to share the message of salvation through Christ.  God’s truth is the guide for problem-solving and technical processes. Ethical and sustainable decisions will be informed by and consistent with biblical principles and truth. | Encourage students to seek true wisdom and discernment when using current and future technology. Technologies will be used for restoration of God’s kingdom values, and for communicating God’s purpose and will.  Technology will be a blessing as honesty, love and service are restored. |

**Note:** The team developed four objectives after discussions about the book “Connecting Learners with God’s Big Story” from Christian Schools Australia, 2015. This books suggests four ‘lenses’ through which to view the world. These align with our understanding of the Great Controversy and provide a useful tool to assist with integrating faith and learning.

**Linking Values for Adventist Schools and Action Responses**

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| **Values for**  **Adventist Schools** | **Action Response**  (Thread Number) | **Description of Action Response** | **Biblical Foundation** | **Key Essential Questions**  **for Students**  Adapted from *Transformation by Design* | **Further Questions**  **for Teachers**  Adapted from *Transformation by Design* | **Sample Teaching and Learning Ideas**  **that reflect an adventist worldview in this value** |
| **Love\*** | **Loving God (1)**  **Building Community (2)**  **Expressing Words (8)** | Respond to God’s love by loving God and in return, their peers as themselves.    Build community by looking out for each other.  Choose to be positive and encourage others. | Matthew 22:37  1 John 4:7-9, 15-16  1 John 4:19  Romans 5:8  John 15:4-5  1 Peter 4:10-11  1 Thessalonians 5:13-14  Philippians 2:1-8  Colossians 3:12-14  Ephesians 4:29  Colossians 4:6  Matthew 12:34-37  Psalm 19:1-4 | * What does it mean to help others as you would like to be helped? * How does looking out for each other build class spirit? * If we promote our opinions does that mean our opinions are right? * Why is it important to choose uplifting words when talking to each other? | * How can I encourage my students to show love to others? * How do we ensure our classrooms are inclusive spaces? * How are we intentionally encouraging our students to use words in a wider arena, e.g. promoting justice, challenging distortions, shaping culture etc.? * How are we exposing students to a rich vocabulary so that they may carefully select the most apt words to use in their written folios and in their verbal expressions? | * Project that is for individuals in need. * Service designed to improve the quality of life of others. * Design of a system to minimise loss to individuals. * Agricultural produce of high nutrition provided for community, improving their health. * Transportation technology improved enabling loved ones to be reunited. * Communication system developed or improved to enable others to better understand, and have better relationships. * Teach students to cook Communion Bread * Teach students the story of Esther and Haman by cooking the Hamantaschen biscuit for the Jewish holiday Purim. |
| **Service\*** | **Building Community (2)**  **Overcoming Setbacks (12)**  **Practising Hospitality (14)**  **Relishing Play (17)** | Build community by looking out for each other.  Build resilience and perseverance.  Sharing generously together.  Enjoying working together in a practical environment. | 1 Peter 4:10-11  1 Thessalonians 5:13-14  Philippians 2:1-8  Colossians 3:12-14  James 1:12  Romans 5:4  James 1:3-5  James 5:11-12  1 John 3:14, 16-18  1 Peter 4:8-10  Hebrews 13:2-3  Luke 14:12-14  Genesis 1:28  Proverbs 8:27-3  Romans 15:13  Ephesians 5:20  Job 38:4,7,32,35,37 | * How does looking out for each other build class spirit? * What does perseverance look like? * How do the hard things we face shape us? * What are the benefits of sharing? * Why can working together be an enjoyable experience? | * How do we ensure our classrooms are inclusive spaces? * What influence does a growth mindset have in our responses to setbacks? * How can I encourage my students to develop perseverance in the classroom? * Do you eagerly anticipate the opportunities to share with your students? * Can we find the balance between work, rest and play? | * Mission Service Trip (i.e. Fly & Build/ STORMCO) * Biggest Morning Tea / Big Cake Bake * Helping Mission trip fundraising by making and selling food. * Making textiles projects (as extensions to the assigned project) for a charity (example: baby blankets for hospitals) or what is needed by the local community (see link as to what charities need), for example   <http://www.givit.org.au>  <https://www.angelblanketaustralia.com> <https://penguinfoundation.org.au/what-s-new/knits-for-nature/> |

\*Denotes the addition of **Love** and **Service** to the Values for Adventist Schools in the table below. Love overarches these values and Service is the active evidence of God’s Love and Kingdom Values. For the purpose of keeping this at the forefront in our thinking, Love and Service have been included along with the values listed below.

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| **Excellence** | **Imagining Innovation (10)**  **Getting Wisdom (9)**  **Overcoming Setbacks (12)**  **Pondering Creation (13)**  **Reflecting Creativity (16)**  **Transforming Thinking (21)** | Design creative solutions to problems.  Knowing how to solve the problem.  Build resilience and perseverance.  Consider creative solutions  Follow a design process to a great outcome reflecting God’s own creativity.  Making deliberate choices through God inspired ethical decision making. | Genesis 1:26-27  Revelation 21:1,5  1 Corinthians 12:5-7  John 1:1-3  Proverbs 4:7  James 1:5  Proverbs 2:6-9  John 14:6  Colossians 2:2-3  James 1:12  Romans 5:4  James 1:3-5  James 5:11-12  Psalm 21:1  Psalm 8:3-4  Psalm 139:13-14  Colossians 1:16  Revelation 4:11  Genesis 1:1,31  Genesis 1:26-27  Psalm 139:13-14  Colossians 1:16  Romans 12:2  2 Corinthians 10:3-5  Philippians 4:6-8  Ephesians 4:22-24  Isaiah 55:8-9 | * How can innovation play a role in problem solving? * How does wisdom help solve a problem? * What does perseverance look like? * How do the hard things we face shape us? * How does God provide solutions? * Why do we associate creativity with God? * What impact does our thinking have on others? | * How do we ensure our innovative projects align with God’s will? * Can wisdom be taught? Can wisdom be assessed? Can wisdom be studied? * What influence does a growth mindset have in our responses to setbacks? * How can I encourage my students to develop perseverance in the classroom? * In what ways are we pausing to consider creative solutions in bringing God into the classroom? * In what ways am I demonstrating God’s creative approach to successful outcomes? * How do we encourage students to think about their thinking? * Where are we utilising moments in our classrooms to highlight how the world's way of thinking is at odds with God's way of thinking? | * Designing a cooking implement for an arthritic sufferer * Final sand on a period piece of furniture * Experimenting with joint construction types * Completing a design folio * Creating a new pasta recipe * Sequencing a production process * Studying the implications in using minerals based paints over water based paints. * Incorporating an electronic component into a textiles project. * Using software and CNC to develop chopping boards for Mother’s Day. * Designing and making aprons for the ADRA cafe staff. * Designing and producing a themed end of year party/formal * Determining the sustainability of rainforest timber use over plantation timber use. * Impact study fast fashion is having on the individual, society and the environment * Consumerism v Minimalism * Designing a new Pathfinder (Australia) uniform. |

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| **Compassion** | **Showing mercy (20)**  **Embracing Diversity (7)**  **Pursuing Peace (15)** | Teachers model God’s mercy.  Students embrace individual points of view and capacities.  Working together in a safe, harmonious learning environment. | Matthew 5:7  Luke 6:35-36  James 2:12-13  Colossians 3:12-13  James 3:17-18  Revelation 7:9-10  Galatians 3:26-29  1 Corinthians 12:12-27  Acts 17:24-27  2 Corinthians 13:11  Colossians 3:15  Colossians 1:19-20  Isaiah 11:6  Luke 4:18-19 | * How should we act towards those who hurt/offend us? * Who deserved mercy? How does God show mercy? * Are all cultures equally valued? * What do other cultures do better than we do? * How does working together create a peaceful classroom? | * How do we teach our students to forgive an offence, and show mercy to others? * How are mercy and grace related? * How can there be unity in Christ when there are such vast differences in culture and people? * What insights and offerings from different people and cultures contribute to the richness of mankind? * What is our school's approach to feeding the hungry, welcoming the stranger, visiting the sick, the elderly and the emotionally wounded? | * Designing water extraction techniques for remote communities or 3rd world countries. * Aid developed for persons with a disability. * Housing systems for refugees. * Mobile kitchen trailer to provide meals on wheels. * Design of public camping shelters, showers and cooking facilities for homeless. * Model taking the punishment of a student who doesn't deserve it. * Put a theme to projects to celebrate a marginalised cultural group. * Cooking meals for those in need in the local community. |
| **Humility** | **Building Community (2)**  **Embracing Diversity (7)**  **Expressing Words (8)** | Build community by looking out for each other.  Embracing individual points of view and capacities.  Choose to be positive and encourage. | 1 Peter 4:10-11  1 Thessalonians 5:13-14  Philippians 2:1-8  Colossians 3:12-14  Revelation 7:9-10  Galatians 3:26-29  1 Corinthians 12:12-27  Acts 17:24-27  Ephesians 4:29  Colossians 4:6  Matthew 12:34-37  Psalm 19:1-4 | * How does looking out for each other build class spirit? * How do we resolve conflict? * Are all cultures equally valued? * What do other cultures do better than we do? * Can words alone ever capture what we truly wish to express? * How do you know when it is time to speak and when it is time to keep silent? | * How do we ensure our classrooms are inclusive spaces? * How can there be unity in Christ when there are such vast differences in culture and people? * What insights and offerings from different people and cultures contribute to the richness of mankind? * How are we intentionally encouraging our students to use words in a wider arena, e.g. promoting justice, challenging distortions, shaping culture etc.? * How are we exposing students to a rich vocabulary so that they may carefully select the most apt words to use in their written folios and in their verbal expressions? | * Project idea: Redesign the classroom (interior design) to better allow for inclusivity * Research: other cultures places of worship (structural design) and compare to the design of Solomon's Temple * Research: Cultures, countries and religions and the impact on food. Such as the Jewish culture for religion (kosha) and how that impacts on their diet Or Morocco and the need to conserve resources when preparing food. (TV Show: Jamie Does & Food Safari) * Design Project: Outdoor furniture for the school common area(s). * Design Project: Cultural clothing project; fashion based on an indigenous style |

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| **Justice** | **Seeking Justice (18)**  **Showing Mercy (20)** | Teachers and students model God’s fairness.  Teachers model God’s mercy. | Psalm 50:6  Isaiah 1:17  Micah 6:8  Amos 5:24  Psalms 146:7-9  Matthew 5:7  Luke 6:35-36  James 2:12-13  Colossians 3:12-13  James 3:17-18 | * Who has the right to judge? * How is justice achieved? E.g. Is justice achieved through punishment? * How should we act towards those who hurt/offend us? * Who deserved mercy? How does God show mercy? | * How do we help shape students strong sense of fairness and lead them to a Godly view of justice? * How do we show God’s love to others through the action of justice? * How do we teach our students to forgive an offence, and show mercy to others? * How are mercy and grace related? | * When critiquing student work ask for feedback; how they feel; why they feel a certain way; teacher fairness: * Group work: Students determine who does what; who works on what; how they work together * Project work: Students create a mixed media mural that depicts indigenous people from 5 different counties * Create a 3D product to bring awareness about homeless people sleeping on city streets * Design an alcohol awareness model, advertisement, or promotion. * Design a product that could be used to create a kick starter campaign to provide funds to offenders, so they can access paid rehabilitation services. * Cook and host a sit down meal for young offenders |
| **Integrity** | **Getting Wisdom (9)**  **Challenging Distortions (5)** | Knowing how to solve the problem.  Challenging the stereotypes to show God’s unconditional acceptance. | Proverbs 4:7  James 1:5  Proverbs 2:6-9  John 14:6  Colossians 2:2-3  Romans 12:9  Romans 12:2a  Titus 2:11-14  Romans 1:25  Acts 17:22-24 | * How does wisdom help solve a problem? * How do you tell ‘good guys’ from ‘bad guys’? | * Can wisdom be taught? Can wisdom be assessed? Can wisdom be studied? * Are our students challenged to appropriately critique the culture they are in? * How do we bring out the goodness of God’s way of doing things? | * Industry study of IP (Intellectual Property) development and compliance * Study the principles of consumerism against minimalism * Determine the impacts of using timbers from developing countries against Australian grown and produced timbers. * Redesign a household water appliance to meet community water saving expectations. * Design beach/park signage that draws attention to community values and expectations. |

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| **Respect** | **Building Community (2)**  **Embracing Diversity (7)**  **Expressing Words (8)** | Build community by looking out for each other.  Embracing individual points of view and capacities.  Choose to be positive and encourage. | 1 Peter 4:10-11  1 Thessalonians 5:13-14  Philippians 2:1-8  Colossians 3:12-14  Revelation 7:9-10  Galatians 3:26-29  1 Corinthians 12:12-27  Acts 17:24-27  Ephesians 4:29  Colossians 4:6  Matthew 12:34-37  Psalm 19:1-4 | * How does looking out for each other build class spirit? * How do we resolve conflict? * Are all cultures equally valued? * What do other cultures do better than we do? * Can words alone ever capture what we truly wish to express? * How do you know when it is time to speak and when it is time to keep silent? | * How do we ensure our classrooms are inclusive spaces? * How can there be unity in Christ when there are such vast differences in culture and people? * What insights and offerings from different people and cultures contribute to the richness of mankind? * How are we intentionally encouraging our students to use words in a wider arena, e.g. promoting justice, challenging distortions, shaping culture etc.? * How are we exposing students to a rich vocabulary so that they may carefully select the most apt words to use in their written folios and in their verbal expressions? | * Project idea: Redesign the classroom (interior design) to better allow for inclusivity * Research: other cultures places of worship (structural design) and compare to the design of Solomon's Temple * Research: Cultures, countries and religions and the impact on food. Such as the Jewish culture for religion (kosha) and how that impacts on their diet Or Morocco and the need to conserve resources when preparing food. (TV Show: Jamie Does & Food Safari) * Design Project: Outdoor furniture for the school common area(s). * Design Project: Cultural clothing project; fashion based on an indigenous style |
| **Discernment** | **Getting Wisdom (9)**  **Transforming Thinking (21)** | Knowing how to solve the problem.  Making deliberate choices through God inspired ethical decision making. | Proverbs 4:7  James 1:5  Proverbs 2:6-9  John 14:6  Colossians 2:2-3  Genesis 1:1,31  Colossians 3:15  Colossians 1:19-20  Isaiah 11:6  Luke 4:18-19 | * How does wisdom help solve a problems? * What impact does our thinking have on others? * How do we transform our thinking to be more Christ-like? | * Can wisdom be taught? Can wisdom be assessed? Can wisdom be studied? * How do we encourage students to think about their thinking? * Where are we utilising moments in our classrooms to highlight how the world's way of thinking is at odds with God's way of thinking? | * Ethical Textiles: Shopping guide to fashion labels in Australia. <https://baptistworldaid.org.au/resources/2016-ethical-fashion-guide/> * The Ethical Shopping Guide: Food and Drink <http://www.ethical.org.au/theguide/>  <http://www.thegoodshoppingguide.com/ethical-food-and-drink/> * Shop Smart, Cook Lever and Waste Less <http://www.jamieoliver.com/savewithjamie/> * Evaluation exercises for product or performances. * Research: Ethical farming practices (Meat industry vs Vegetarianism) |

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| **Responsibility** | **Caretaking Earth (3)**  **Building Community (2)**  **Understanding Vocation (22)** | Actively respond to God’s call to carefully manage all of creation.  Build community by looking out for each other.  Enrich theirs and others’ lives through developing and using their God-given gifts. | Psalm 24:1  Genesis 1:28  Psalm 8:5-8  Genesis 2:15  1 Peter 4:10-11  1 Thessalonians 5:13-14  Philippians 2:1-8  Colossians 3:12-14  Genesis 2:2-3  Genesis 3:23  Exodus 35:24b-26  Ephesians 6:7  Colossians 3:22-25 | * How should we take care of the earth? * Have humans gone too far in their use of the earth’s resources? * How does looking out for each other build class spirit? * How do we resolve conflict? * How do we reflect our Creator in our work? | * How are we taking care of the earth’s resources that we have been given? * What do we need to stop doing - locally, nationally, internationally in order to care for God's world? * How do we ensure our classrooms are inclusive spaces? * How are we preparing students for responsive discipleship when they enter the workforce? | * Recycling and reusing waste/leftover foods to create a new dish. * Turning orange for the orangutans: Orangutan Care Week (palm oil). * Dying fabrics with plant dyes rather than chemical dyes (particularly good for wool, cotton and linen fabrics). * Project Idea: Using reclaimed materials to create a new project e.g. upcycling pallets to create outdoor furniture * Buy local ingredients/ materials * Research: Certified sustainable materials * As a group Identify a recycling initiative to undertake at school * Use appropriate techniques to repair an item of furniture * Explore career paths that led to design & technology * Practical exam where students have to teach a younger student a new skill needed for them to create a small toy |
| **Hope** | **Overcoming Setbacks (12)**  **Celebrating Life (4)**  **Relishing Play (17)** | Build resilience and perseverance.  Everybody working together, helping each other and celebrating achievements.  Enjoying working together in a practical environment. | James 1:12  Romans 5:4  James 1:3-5  James 5:11-12  Genesis 2:7  Genesis 1:28-31  Psalm 16:8, 8a, 11  Ecclesiastes 9:10  Psalm 90:14,17  Genesis 1:28  Proverbs 8:27-3  Romans 15:13  Ephesians 5:20  Job 38:4, 7,32,35,37 | * How do we respond to setbacks? * What does perseverance look like? * How do we help others who are struggling to flourish? * What role does play have in generating new ideas? | * What influence does a growth mindset have in our responses to setbacks? * How can I encourage my students to develop perseverance in the classroom? * How are we encouraging our students to celebrate gifts and the giver, in order for them to flourish? * Can we find the balance between work, rest and play? | * Measure twice, cut once - results in less setbacks * Scaffold projects so that success is more likely * Encourage submission of drafts to help students think through project steps more thoroughly * Have a celebration that showcases the work students have achieved. * Explore safe i.e. low toxicity finishes * Project Idea: CO2 cartridge cars (Pitsco racer), bottle rockets. |

Key *Values* of the scriptural story can be woven through the curriculum and thereby ‘draw together’ meaning and purpose in learning.

These numbers in the Action Response column correspond to the Threads in ‘*Transformation by Design*” by the National Institute for Christian Education, 2015

**Please Note:**

The pro formas and samples that follow are not meant to be prescriptive.  Each Conference has its own set format for programs and documentation. However, if these would help then please feel free to utilise them.

The important thing is that there is embedded in our documentation a clearly articulated Adventist worldview and reference to a desired student response of threads and values.  If this is not inherent in existing documentation, then the “God in my Unit” sheet is possibly the easiest way to ensure that this criteria is met. (Formats in both portrait and landscape are available on the Adventist Schools Australia website <http://asa.adventist.edu.au> )

***God in my Unit* Template**

*To be used with existing unit documentation to assist in intentionally including an Adventist worldview*

|  |
| --- |
| **1. UNIT FOCUS**  *What is the main focus of the unit / key questions?* |
| **2. WINDOW ON THE ADVENTIST WORLDVIEW**  *What are the main connections between the Biblical themes and the unit?* |
| **3. THREADS/VALUES**  *What main values are in this unit? How might students respond to these values?* |
| **4. APPLIED THROUGH THE UNIT:**  *Where will the Adventist worldview and threads / values be applied specifically through the unit?*  *i.e. p 2 – reflect on the mercy of God as the story unfolds* |

Template based on: National Institute for Christian Education, (2015) *Transformation by Design,* p19 The Big Picture Template

**Pro Forma for Unit Development using Understanding by Design**

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage 1 – Desired Result** | | | |
| **Established Goals** | **Transfer** | | |
| *Students will be able to independently use their learning to:* | | |
| **Window on the Adventist Worldview** | | **Values / student response** |
| *Share the way an Adventist world impacts on:* | | *Identify the values / desired student response:* |
| **Meaning** | | |
| Understandings:  *Students will understand that:* | | Essential Questions  *Students will keep considering:* |
| **Acquisition of Knowledge and Skill** | | |
| *Students will know:* | | *Students will be skilled at:* |
| **Stage 2 - Evidence** | | | |
| **Evaluative Criteria** | *Students will show their learning by:* | | |
|  | Performance Tasks: | | |
|  | Other evidence: | | |
| **Stage 3 – Learning Plan** | | | |
| *Summary of Key Learning Events and Instructions* | | | |
|  | | *Progress Monitoring* | |

Based on: Wiggins, G. P., & McTighe, J, (2011) *the Understanding by Design Guide to Creating High Quality Units*, Moorabbin, Victoria: Hawker Brownlow Education.

**Sample Unit** using **Understanding by Design** template

**Technology Inquiry Unit – [Year 7 – Fibre]**

|  |  |  |
| --- | --- | --- |
| **Stage 1 – Desired Result** | | |
| **Established Goals**  Students will investigate a range of natural fibres. This includes a study of fibre production from farm to fashion item. Students will design and produce a pillow case.  Analyse how food and [fibre](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=fibre) are produced when [designing](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=designing) managed environments and how these can become more [sustainable](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=sustainable) [[ACTDEK032]](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEK032)  Critique needs or opportunities for [designing](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=designing) and investigate, analyse and select from a range of materials, [components](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=components), tools, [equipment](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=equipment) and processes to develop design ideas [[ACTDEP035]](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEP035) | **Transfer** | |
| *Students will be able to independently use their learning to:*   * Analyse the production of natural fibres * Identify the ethical issues in fibre production and gain an understanding that not all fabric production recognizes human rights. * Follow a design process to create a great pillowcase reflecting God’s own creativity. | |
| **Window on the Adventist Worldview** | **Values / student response** |
| *Share the way an Adventist world impacts on:*   * Greed and self-centeredness has sprinkled the fashion industry with pain and hardship. “According to God’s intelligence, the way to thrive is to help others thrive; the way to flourish is to cause others to flourish; the way to fulfil yourself is to spend yourself” Plantinga, 2002, p.22. * History shows that innovations can be useful and harmful to society. * God helps us solve solutions individually and as a class. * God reveals himself as a God of creativity. * Making deliberate choices through God inspired ethical decision making. * Overcoming setbacks can shape us. | *Identify the values / desired student response:*  Excellence -Pondering Creation (13), Reflecting Creativity (16)  Discernment -Transforming Thinking (21)  Service - Overcoming Setbacks (12)  Hope - Celebrating Life (4) |
| **Meaning** | |
| Understandings:  *Students will understand that:*   * Fibre production is found in many cultures and environments * Fibre production can have a negative impact on the environment * Fibre production can provide employment for many * Fibres have many uses in our homes and can easily be used to create things * Sustainability of fibre production is essential for our day to day life | Essential Questions  *Students will keep considering:*   * How to become more sustainable? * How does investigating fibre production help us become more aware of ethical issues facing the industry? * How does God impact on designing and creating? * How does the process of design teach us patience, kindness and help guide resilience? |

|  |  |  |
| --- | --- | --- |
| **Acquisition of Knowledge and Skill** | | |
| *Students will know:*   * Basic sewing skills such as sewing straight, reversing, corners and seam allowances. * How to create a flow chart. * How to follow a basic design brief. * Self-evaluation. * The basic fibres production process for plant based fibres. * Know about the ethical issues associated with the fashion industry such as slavery. * Understand the significance of one's decisions as a consumer. | | *Students will be skilled at:*   * Use of the sewing machine: Threading a machine/ filling a bobbin. * Identifying natural fibres * Constructing a basic pillowcase * Following pattern steps and instructions * Completing a flow chart * Creating and adapting design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. * Applying project management skills to document and use project plans to manage production processes. * Using a range of symbols and technical terms in a range of contexts to produce patterns. * Developing plans to manage design tasks, including safe and responsible use of materials and tools, and apply management plans to successfully complete design tasks. |
| **Stage 2 - Evidence** | | |
| **Evaluative Criteria** | *Students will show their learning by:* | |
|  | **Performance Tasks:**   * Research Task * Creating textiles project * Questions for evaluation * Flow chart | **Other evidence:**   * Demonstrate their ability to work cooperatively with other students * Striving to do their best in all tasks * Respectful in discussions and interactions with other students * Continue working after students have seen setbacks * Build community by looking out for each other * Being patience and respectful when needing assistance. |
| **Stage 3 – Learning Plan** | | |
| *Summary of Key Learning Events and Instructions* | | |
| Natural Fibre Identification:   * Wool / Silk / Cotton / Linen   Flow Chart showing the process of natural fibre production including ethical issues associated with each of:   * Farm / Factory / Fashion   Design Brief   * Textiles Project - Know how to use a sewing machine. * Construction - Understanding the steps required to construct the given project.   Evaluation of Product   * Questions for evaluation * Teacher mark (from rubric) | | *Progress Monitoring*  Identification of natural fibre samples.  Research task with Flow chart on the production of a natural fibre.  Textiles Project with design brief.  Textiles folder: Sample sew, sample fabrics and pre-sewing worksheets (examples; sewing licence). |

Based on: Wiggins, G. P., & McTighe, J, (2011) *The Understanding by Design Guide to Creating High Quality Units*, Moorabbin, Victoria: Hawker Brownlow Education.

**Sample Unit** using **Understanding by Design** template

**Technology Inquiry Unit – [Year 7 – Woodwork]**

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage 1 – Desired Result** | | | |
| **Established Goals**  Investigate the ways in which products, services and environments evolve locally, regionally and globally and how competing factors including social, ethical and sustainability considerations are prioritised in the development of technologies and designed solutions for preferred futures. [ACTDEK029]  Analyse ways to produce designed solutions through selecting and combining characteristics and properties of material, systems, components, tools and equipment. [ACTDEK034]  Critique needs or opportunities for designing and investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas. [ACTDEP035]  Generate, develop, test and communicate design ideas, plans and processes for various audiences using appropriate technical terms and technologies including graphical representation techniques. [ACTDEP036]  Select and justify choices of materials, [components](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=components), tools, [equipment](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=equipment) and techniques to effectively and safely make designed solutions [[ACTDEP037]](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEP037)  Independently develop [criteria for success](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=criteria+for+success) to evaluate design ideas, processes and solutions and their sustainability [[ACTDEP038]](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEP038)  Use [project management](http://www.australiancurriculum.edu.au/glossary/popup?a=T&t=project+management) processes when working individually and collaboratively to coordinate production of designed solutions [[ACTDEP039]](http://www.australiancurriculum.edu.au/curriculum/contentdescription/ACTDEP039) | **Transfer** | | |
| *Students will be able to independently use their learning to:*  Safely design, manufacture and evaluate an aesthetically pleasing quality built timber box from resources supplied by the school, in the school workshop and by the end of Term 1. | | |
| **Window on the Adventist Worldview** | **Values / student response** | |
| *Share the way an Adventist world impacts on:*   * How innovation plays a role in problem solving? * How wisdom helps solve a problem? * How does God provide solutions? * How we respond to setbacks? * What perseverance looks like? * How we should take care of the earth? * Have humans gone too far in their use of the earth’s resources? | *Identify the values / desired student response:*  Excellence - Imagining Innovation (10) & Pondering Creativity (16)  Hope - Setbacks (12)  Responsibility - Caretaking Earth (3) | |
| **Meaning** | | |
| Understandings:  *Students will understand that:*   * Certain factors influence design * Design & Technology innovations impact on our daily lives * Evaluation of need or opportunities is essential when designing a solution * Develop criteria for success; what the product must achieve * Sustainability needs to be prioritised when designing solutions * Communicating to different audiences requires the selection of appropriate technical terms and a range of technologies and graphical representation techniques. * Graphically communicate designed solutions * Produce a time management plan in understanding management principles | Essential Questions  *Students will keep considering:*   * Factors that influence the design of products, services and environments to meet present and future needs. * The contribution of design and technology innovations and enterprise to society. * How the features of technologies impact on designed solutions and influence design decisions. * Creating designed solutions based on an evaluation of needs or opportunities. * Developing criteria for success, including sustainability considerations, and use these to judge the suitability of their ideas and designed solutions and processes. * Creating and adapting design ideas, make considered decisions and communicate to different audiences using appropriate technical terms and a range of technologies and graphical representation techniques. * Applying project management skills to document and use project plans to manage production processes. * Independently and safely produce effective designed solutions for the intended purpose. | |
| **Acquisition of Knowledge and Skill** | | |
| *Students will know:*   * Technologies and society   + the use, development and impact of technologies in people’s lives * Technologies contexts * Technologies and design across a range of technologies contexts | *Students will be skilled at:*  Creating designed solutions by:   * investigating and defining * generating and designing * producing and implementing * evaluating * collaborating and managing | |
| **Stage 2 - Evidence** | | | |
| **Evaluative Criteria** | *Students will show their learning by:* | | |
|  | Performance Tasks:   * Criteria for success (as determined by the student in Design Folio - design process) * Performance Tasks: * Small Box Design Folio * Small Box Practical Product * Evaluation of Product and Performance | | |
| **Stage 3 – Learning Plan** | | | |
| *Summary of Key Learning Events and Instructions* | | | |
| Define: What technology is  Explore: Role of technology throughout history  Define: What Safety is  Understand the use of Personal Protective Equipment (PPE)   * Protective eyewear / ear muffs / shoes   Read: Story of Creation  Explore:   * How trees benefit us * How trees are classified into Hardwood & Softwood * Properties of Timber   Identify and Classify:   * Hand tools * The 5 families of Hand tool families (Marking Out and Measuring, Cutting tools, Clamping and Holding devices, Percussion tools, Torsion tools)   Demonstrate:   * Selecting timber * Measuring and marking out * Sawing * Sanding techniques * Joining * Nailing * Gluing * Using putty   Introduction to Graphics:   * Freehand sketching (2D) * Isometric drawing (3D)   List and describe examples of the Design Process   * Brief * Constraints * Design Safety * Criteria for evaluation * Initial Ideas * Research * Working Drawings * Time Management * Cutting materials and costing guide   Produce a quality product   * Measuring and marking out * Cutting materials to size * Cutting joints * Shaping * Base and top * Dry assembly * Gluing and fixing * Clamping * Sanding * Finishes   Evaluation of product  Marketing of product | | | *Progress Monitoring*  Formative assessments:  Safety sheets or tests  CAD drawings  Design folio check  Summative  Design folio  Related Studies  Research Task  Time management sheet  Materials list  Practical Product |

Based on: Wiggins, G. P., & McTighe, J, (2011) *The Understanding by Design Guide to Creating High Quality Units*, Moorabbin, Victoria: Hawker Brownlow Education

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