

# INTRODUCTION

PAUL HEDE, ARCHITECT

DIRECTOR – HEDE ARCHITECTS PTY LTD, AUSTRALIA

- DISABILITY IN OUR SOCIETY
- THE REACTION
- CASE STUDIES
  - AUSTRALIA
  - SCANDINAVIA
  - USA
- DISCUSSION

# DISABILITY IN OUR SOCIETY

## THE COMMUNITY RESPONSE

### HOW DOES SOCIETY VIEW IT?

- Disability is a part of society – in Australia  
668,000 are disabled out of a population of 23million
- It is not an oddity
- It should not involve pity
- Focus should not be on what they can't do
- It is the parents' problem



“There are problems with the system, not the children” Senator Sue Boyce, Queensland



# DISABILITY IN OUR SOCIETY

## THE PARENT'S RESPONSE – THE EARLY YEARS

- Informed at birth
- Slowly observing child
- Missing achievements
- Developing habits
- Let's go and see what is going on
- Slow acceptance

# DISABILITY IN OUR SOCIETY

## COMMUNITY RESPONSE

**Fitzgerald Law Firm**  
10-323-9900  
www.lawfitz.com

<b>Slip &amp; Fall</b> \$700,000 A10161* Stairway Defect	<b>Brain Damage</b> \$3,500,000 A06014* Meconium Aspiration Syndrome
<b>Autism - ADHD</b> \$1,300,000 A07051* Misdiagnosis of Autism	<b>Workplace Injury</b> \$955,000 A00044* Worker Fall From Platform

*The Fitzgerald Law Firm has recovered more than \$10 million for its clients.*

**Labor & Delivery**  
\$16 million A06072\*  
Hospital Ignored Fetal Distress

**Premature Birth**  
\$5,800,000 A10047\*  
Failure To Resuscitate 28 Week Baby

**Cerebral Palsy**  
\$4,400,000 A07076\*  
Obstetrical Negligence

**Seizure Disorder**  
\$6,500,000 A08157\*  
Cerebral Palsy At Birth • Later Seizures

**Developmental Delays**  
\$5 million A06143\*  
Failure To Diagnose C-section • Severe Delays

**Auto Accident**  
\$4,250,000 A01001\*  
Serious Orthopedic Injuries

**Lead Paint Poisoning**  
\$5,850,000 01341A\*  
Settlement For Six Bronx Children

**Landlord Negligence**  
\$4,750,000 A06113\*  
Hardware Fire • Tenant Suffers Serious Injury

*The Fitzgerald Law Firm has recovered more than \$10 million for its clients.*

Subway Advertising - NYC

# DISABILITY IN OUR SOCIETY

## COMMUNITY RESPONSE

- Society Reaction
  - Education Response
  - Community Response
    - Australia
    - Europe
    - USA
  - Education Response
    - USA,  
Break up / diagnosis, US compartmentalization
    - Scandinavia, Australia
    - Early Intervention
    - Formation of a plan
- |         |
|---------|
| Private |
| Public  |

# DISABILITY IN OUR SOCIETY

PORT PHILLIP SPECIAL DISABILITY SCHOOL (TRANSITION  
LEARNING CENTRE)

- EARLY INTERVENTION AND TRANSITION TO POST SCHOOL





# DISABILITY IN OUR SOCIETY

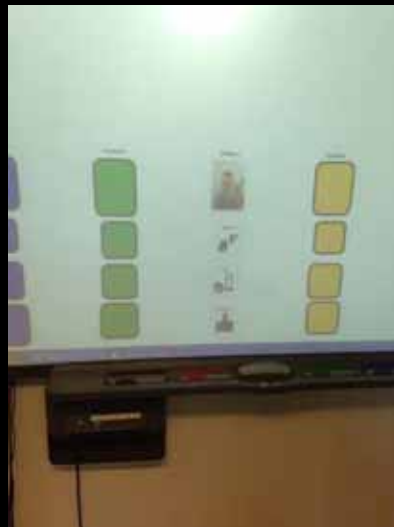
## SPECIAL SCHOOL, DENMARK



Reused old villa –  
Early Years,  
Parents Education



Break up spaces



Interactive  
planning  
whiteboard



Small homelike spaces

# DISABILITY IN OUR SOCIETY

## THE SCHOOL RESPONSE

- Australia
- Scandinavia

System of Special  
Schools and integration  
in mainstream schools  
  
Student centred plan

State of Victoria, Australia

Total School Population

12,000 disabled in regular schools

10,700 in special schools

Total School Population 565,000

- USA
- Disabled special schools - “Typical fee of \$60,000USD per annum”
- Integration into mainstream
- Student centred in part but maintenance of standard curriculum



# DISABILITY IN OUR SOCIETY

## WHAT ABOUT THE PARENTS / SCHOOL RELATIONSHIP

- Parents assisted in acceptance
- Full contact with schools
- Growing engagement with other parents
- School support / education / training
- Schools must commit to this part of their role

“Unfortunately, success at school for a child like mine is at the mercy of number crunchers. But, I was told, we were lucky. The school was allocated funding to support a teacher’s aide for 2.5 hours a week, which is as good as it gets. But not nearly enough.”

Karen Pakula, The Parent

# DISABILITY IN OUR SOCIETY

## EASTERN RANGES SCHOOL, AUSTRALIA



## PARENTS AREA



# DISABILITY IN OUR SOCIETY

## COMPARISON OF SETTINGS

### SPECIALIST

- Curriculum to suit life skills and future
- Acceptance of student individuality - individual plan
- Nurture strengths, work of students' interest
- Seek to reduce weakness
- Life Skills: try to identify options for future life
- Create employment opportunities
- Ease student into post school activities, adult centres
- Nurture friendships

### MAINSTREAM

- One size fits all
- Supply of aid to assist to meet requirements of inclusion - keep up, catch up
- Increasingly student centred, trying to follow interests – changing pedagogy
- Seek to fill gaps
- Subject based: curriculum geared to academic achievement
- Employment base on grades
- Work Placement
- Not a concern of schools. 'normal students' however many are not coping – bullying, depression, alienation.

# DISABILITY IN OUR SOCIETY

## COMPARISON OF SETTINGS -

MAINSTREAM SCHOOL DISABLED STUDENTS BASE

- INDIVIDUAL OPTION / COLLECTIVE OPTION

## HOMEHOF SECONDARY SCHOOL





# DISABILITY IN OUR SOCIETY

## COMPARISON OF SETTINGS - SPECIAL SCHOOL

### WESTERN AUTISTIC SCHOOL, AUSTRALIA



# DISABILITY IN OUR SOCIETY

## DESIGN PRINCIPLES FOR ALL STUDENTS

- Analysis of student
- Understanding their disability
- Giving them the training to learn about themselves
- Capacity to learn
- Capacity to cope with the school
- Need for control of environment – Acoustic, hearing
- Behavioural problems
- Time out
- Stressful situations – areas to calm
  - Indoor
  - Outdoor

QUESTION - Is this really applicable only to disabled students ?



# DISABILITY IN OUR SOCIETY

## DESIGN PRINCIPLES FOR ALL STUDENTS

### ITEMS APPLYING TO ALL STUDENTS – NOT JUST DISABLED

- Lack of interest
- engagement
- Is education system for all so different
- Depression, Inspiration can disable any student
- Individual motivation always required

# DISABILITY IN OUR SOCIETY

## WHERE IS EDUCATION GOING?

## WHAT IS SUCCESS?

Christian Long – 2013 CEFPI Conference in New Zealand

Cannon Design

“Failure is an attitude. Need to break things to create NEW”.

- Need to prepare young people for LIFE.

“Get comfortable with NOT QUITE RIGHT. Fail better, fail faster.”

- How do students go right through school and end up disillusioned, isolated
- Autistic students went right through mainstream yet only discovered as adults when at home – isolated, no activity, no friends.
- Evaluation to be based on engagement with student, get them to initiate learning, give them tools for learning, offer support, understanding, link to society.

# CASE STUDIES

## SPECIALIST SETTINGS AND MAINSTREAM

### AUSTRALIA

- Port Philip SDS
- Northern School for Autism
  - Evolution of the Design
- Western Autistic School
- Eastern Ranges School
- Merriang Specialist School
  - Masterplan & Stages
  - Stage 1
- Berandale / Katandra Special School

### SCANDINAVIAN

- Special School
- Homehof Secondary School
- Specialistern
- Hellerod School
- Svenska Skolan School for Blind
- Saunalahden Koulo Espoo

### USA

- Gateway School, NYC
- Learning Spring School, NYC
- St Colletta School, Washington DC

# AUSTRALIA

## PORT PHILLIP SPECIALIST SCHOOL



An Arts based curriculum

# AUSTRALIA

## PORT PHILLIP SPECIALIST SCHOOL



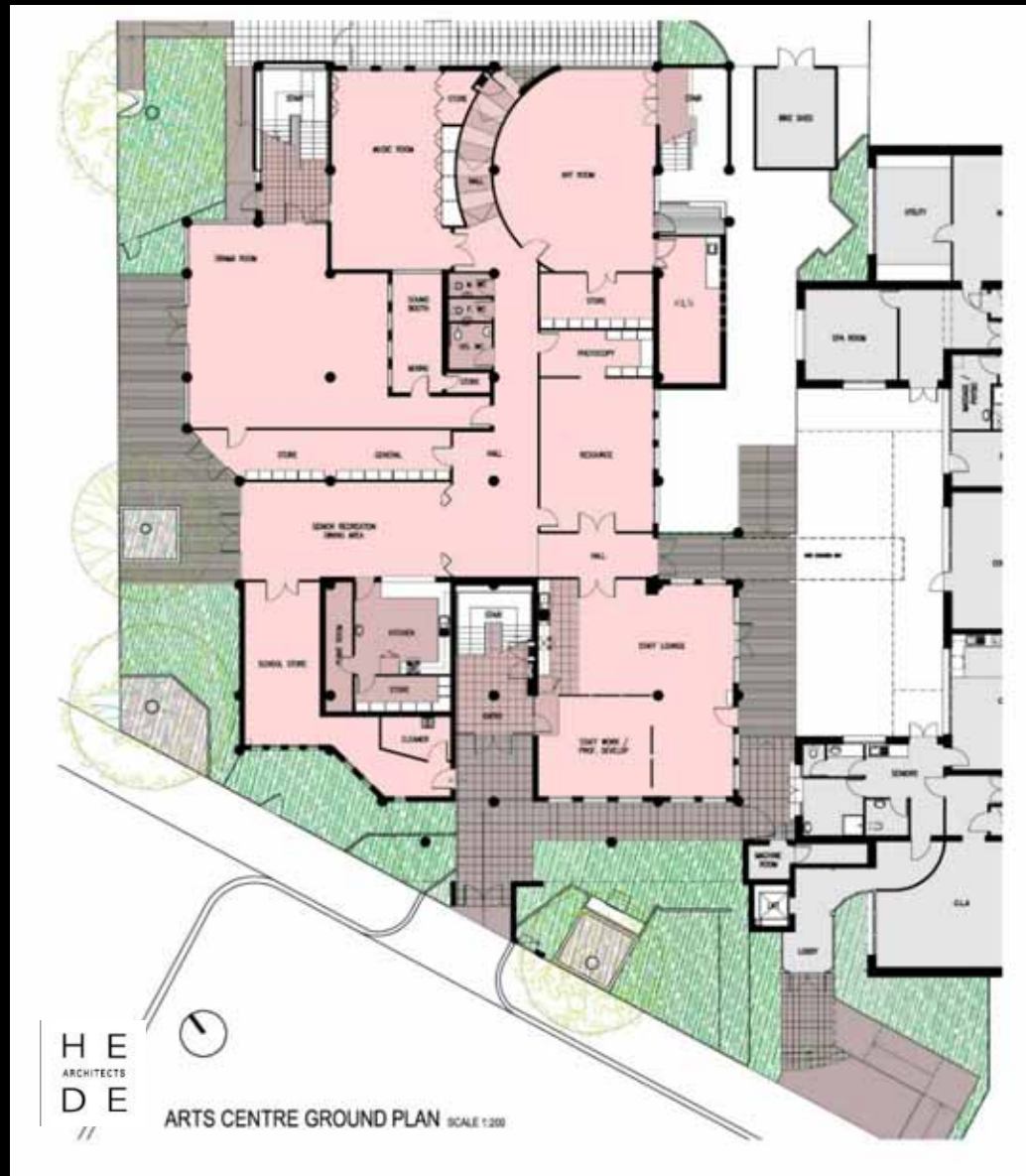
### Fully serviced school model

- Bridge linking first floor
  - University of Melbourne – Teacher Training
- Support Services
  - Physio / Speech / Occupation
  - Dental Surgery
  - Parents / Staff Resources Room
  - ICT Centre
- Full Arts Based Curriculum



# AUSTRALIA

## PORT PHILLIP SPECIALIST SCHOOL



Stage 4 Works

An Arts based curriculum



# AUSTRALIA

## PORT PHILLIP SPECIALIST SCHOOL

An Arts based curriculum



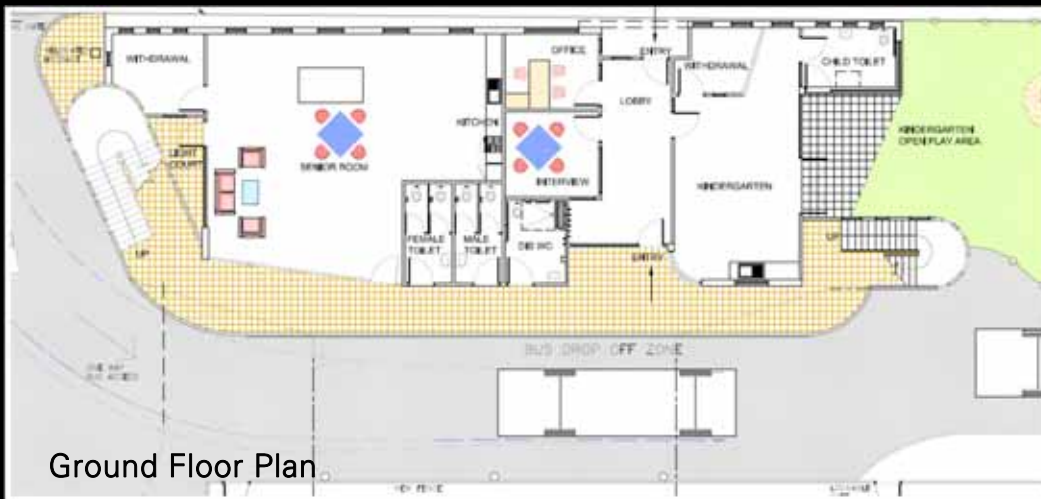
This involved the design & construction of a new Performing Arts Centre. New spaces included a Performing space, Kitchen, Drama, Music & Art Rooms & Homecrafts Area.

# AUSTRALIA

## PORT PHILLIP SPECIALIST SCHOOL



First Floor Plan



Ground Floor Plan

### Transition Learning Centre

This is a new building Hede Architects have designed for the Port Phillip Specialist School. It contains three large classrooms as well as senior student spaces & an Early Learning Centre.

### Transition Learning Centre Port Phillip Specialist School



DESIGN  
CONSTRUCT  
MANAGE





# AUSTRALIA

## NORTHERN SCHOOL FOR AUTISM

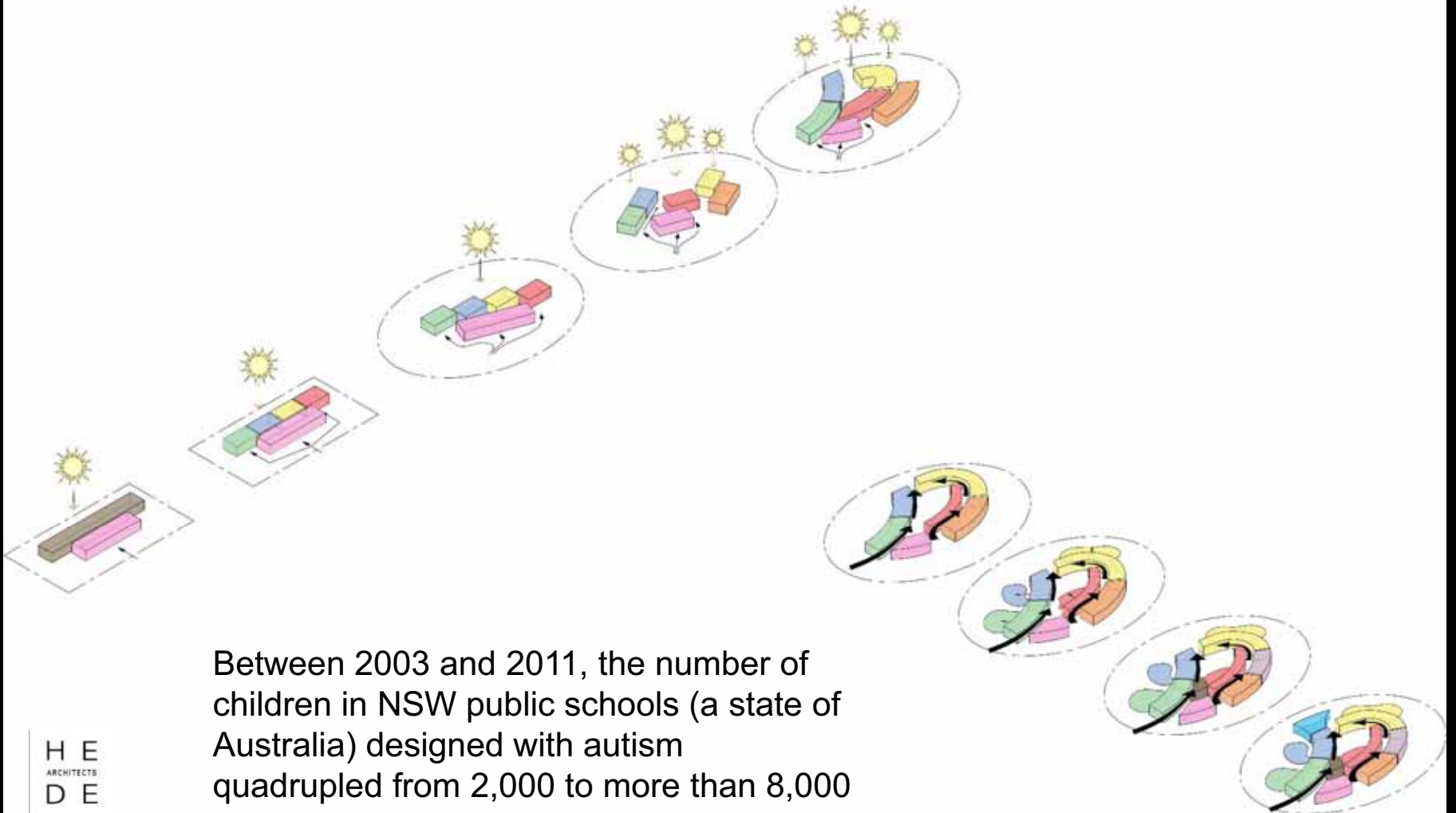
2013 AUSTRALASIAN CEFPI

– BEST BUILDING OF CONFERENCE - WINNER  
– NEW CONSTRUCTION - WINNER



# AUSTRALIA

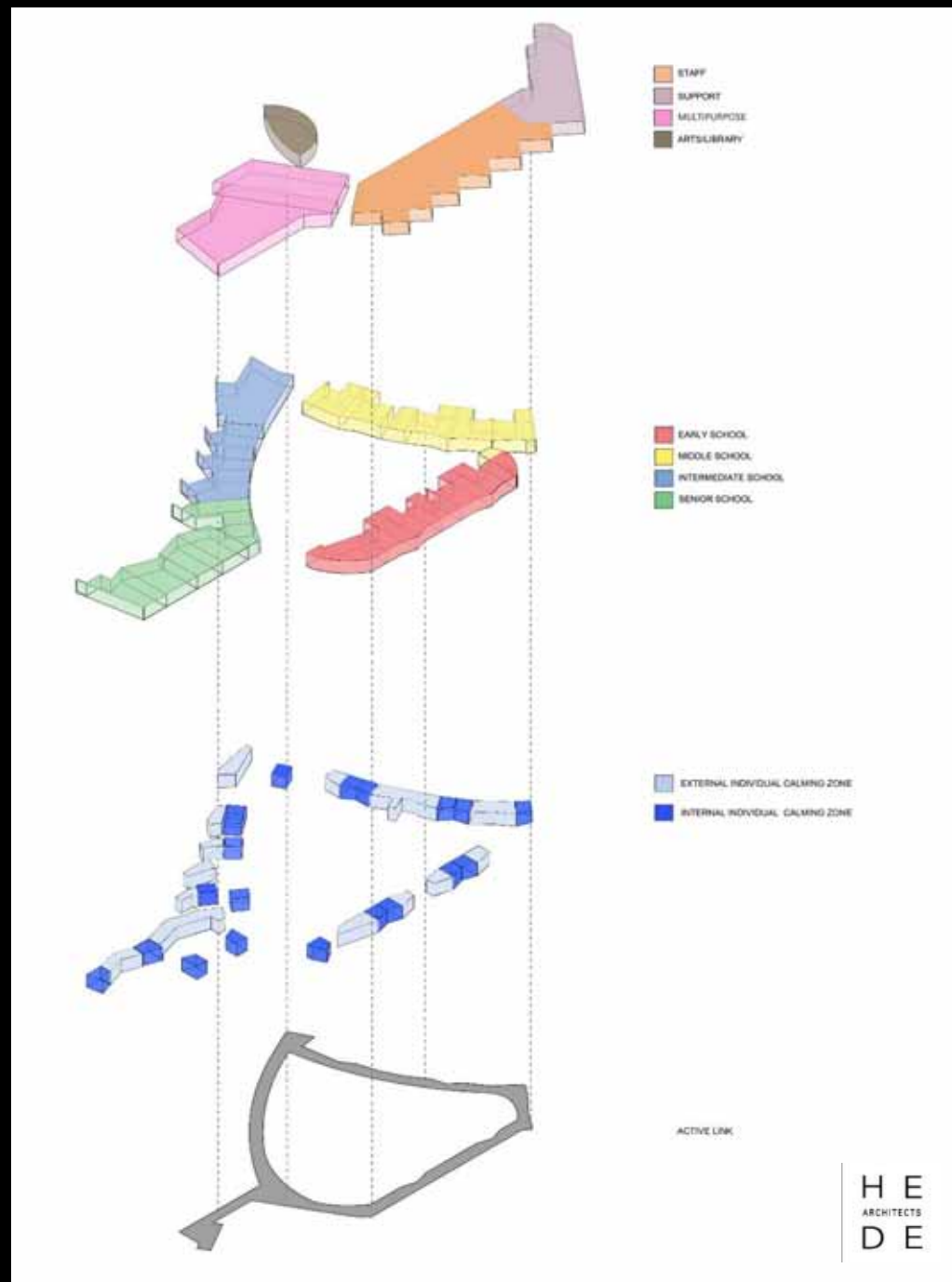
## NORTHERN SCHOOL FOR AUTISM



Between 2003 and 2011, the number of children in NSW public schools (a state of Australia) designed with autism quadrupled from 2,000 to more than 8,000

# AUSTRALIA

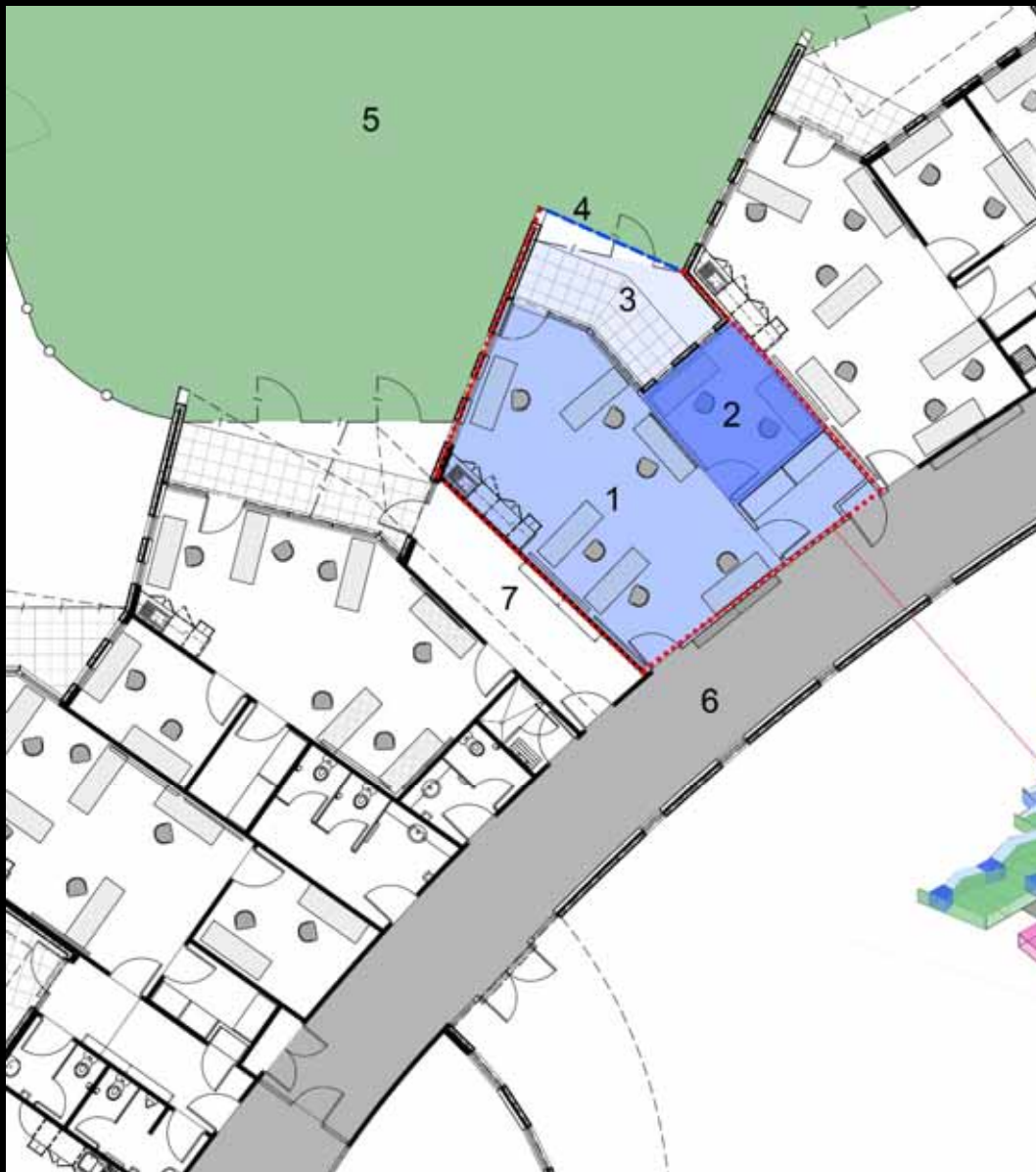
## NORTHERN SCHOOL FOR AUTISM





# AUSTRALIA

## NORTHERN SCHOOL FOR AUTISM



### EACH LEARNING AREA HAS THE FOLLOWING CHARACTERISTICS

#### 1. MAIN LEARNING AREA (INTERMEDIATE)

A learning space with a store to enable the amount of furniture and equipment to be controlled by teachers. (Students can use objects aggressively)

#### 2. WITHDRAWAL ROOM (QUIET LEARNING)

A withdrawal room which could be for quieter learning by 1 or 2 students or alternatively a calming room for an agitated or anxious student.

#### 3. OUTDOOR WITHDRAWAL ZONE

The learning area has access direct to an outside space for self calming

#### 4. UNDERCOVER AREA (ROOFLINE)

Under cover but with north sun access and access to the subschool space.

#### 5. OUTDOOR PLAY AREA

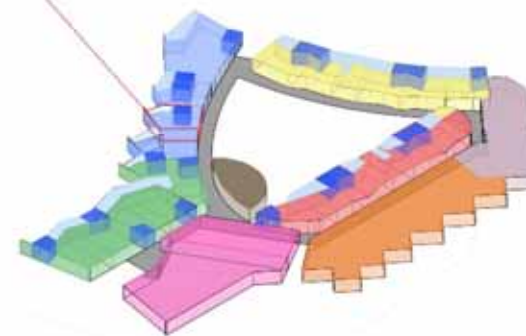
The outdoor spaces were deliberately free from trees and landscaping due to student's propensity to eat/destroy them. However bike riding, climbing and sand play are highly enjoyed by students. The play directly connects to each learning area as well as central toilets and passages.

#### 6. CIRCULATION

Little distraction from the access passage. However the design of all learning areas had alternative means of escape for staff and students from all rooms.

#### 7. INDEPENDENT ACCESS AND PLAN

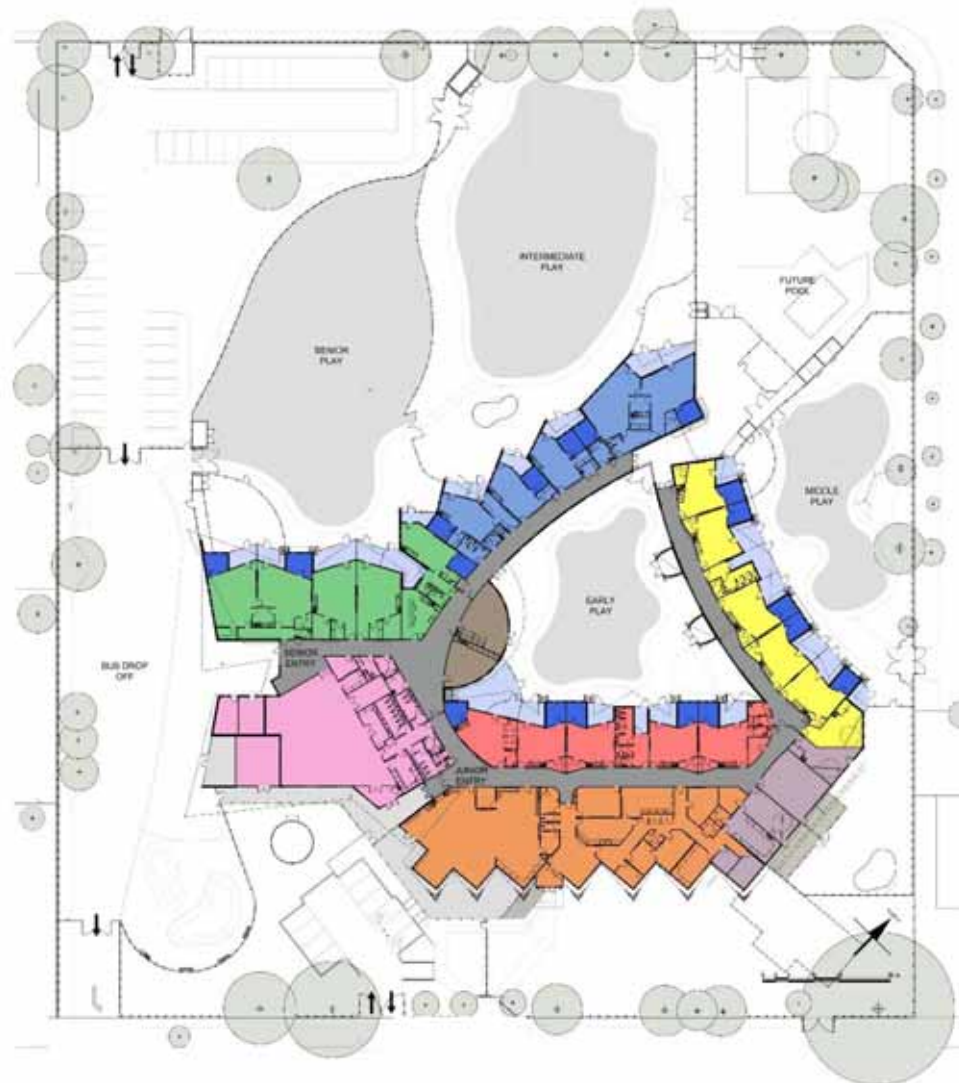
Access to toilets for students/staff from building independent of learning areas





# AUSTRALIA

# NORTHERN SCHOOL FOR AUTISM



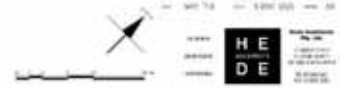
DETAIL FLOOR PLAN OF TYPICAL LEARNING SPACE  
1:100

## EACH LEARNING AREA HAS THE FOLLOWING CHARACTERISTICS

- 1. SPACE (LEARNING AREA (INTERMEDIATE))**  
A learning space with a view to create the personal functions and equipment to be needed by students. (Students can use various equipment)
- 2. WITHDRAWAL ROOM (QUIET LEARNING)**  
A withdrawal room which could be for quiet learning by 1 or 2 students or alternatively a quiet room for an individual or small group
- 3. OUTDOOR WITHDRAWAL ZONE**  
The learning area has an outdoor zone for withdrawal space for self-reflection
- 4. UNDERCOVER AREA (RECREATION)**  
Under cover but not inside the building and access to the outdoor space
- 5. OUTDOOR PLAY AREA**  
The outdoor space was designed free from trees and landscaping that is designed to be accessible to all students. However, the space, dining area, and play area are fully inspired by students. The play, dining area, and play area are fully inspired by students. The play, dining area, and play area are fully inspired by students.
- 6. CIRCULATION**  
The circulation is for the entire building. However, the design of all learning areas has a common theme of access for staff and students from all rooms
- 7. INDEPENDENT ACCESSIBLE PLAN**  
Access to the building for independent from building independent of learning space

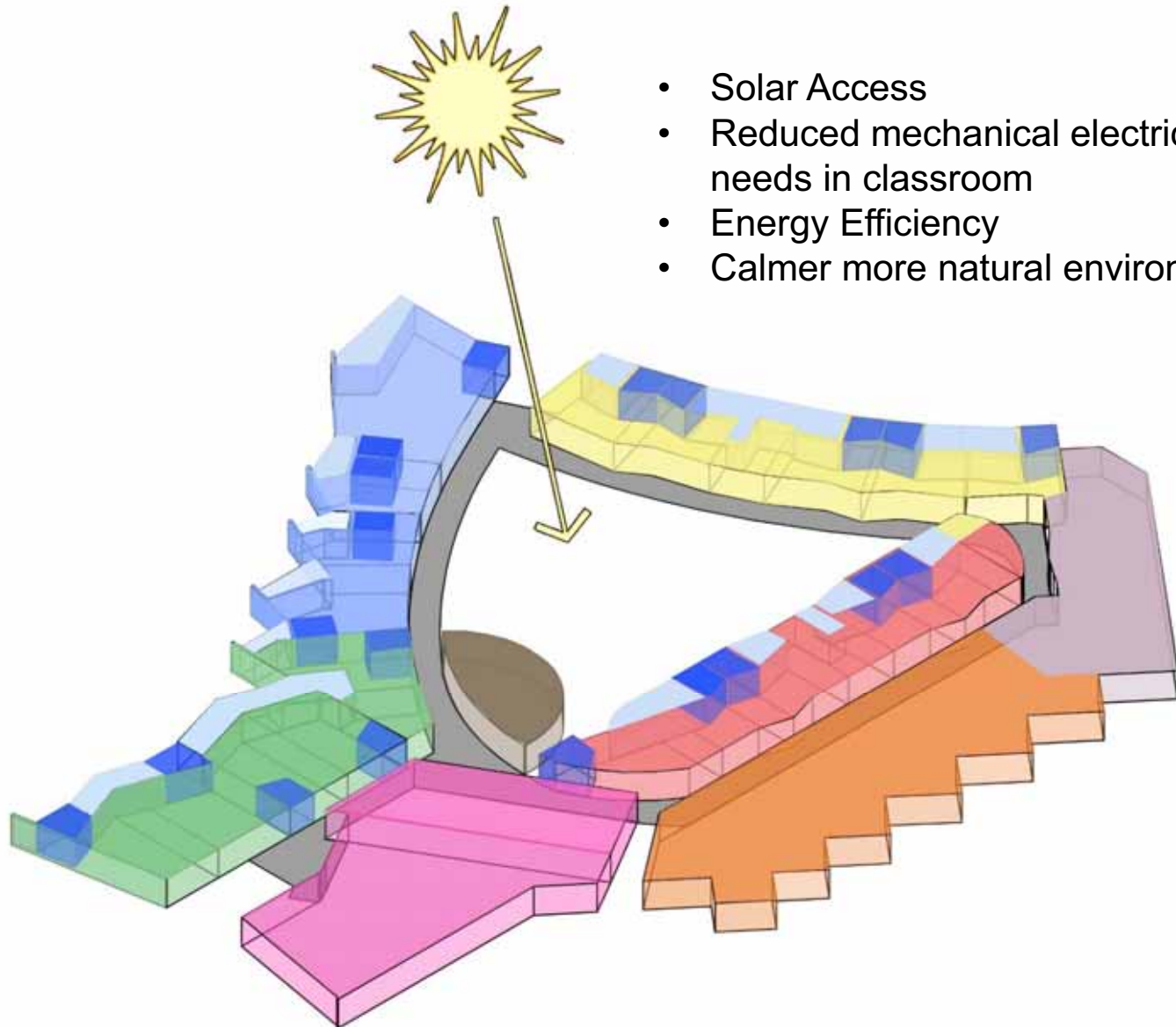
- STAFF
- SUPPORT
- MULTIPURPOSE
- ARTS/LIBRARY
- SENIOR SCHOOL
- EARLY SCHOOL
- MIDDLE SCHOOL
- INTERMEDIATE SCHOOL
- INTERNAL WITHDRAWAL ZONE
- EXTERNAL WITHDRAWAL ZONE

NORTHERN SCHOOL  
FOR AUTISM  
DIAGRAMATIC FLOOR PLAN



# AUSTRALIA

## NORTHERN SCHOOL FOR AUTISM



- Solar Access
- Reduced mechanical electrical needs in classroom
- Energy Efficiency
- Calmer more natural environment

# NORTHERN SCHOOL FOR AUTISM



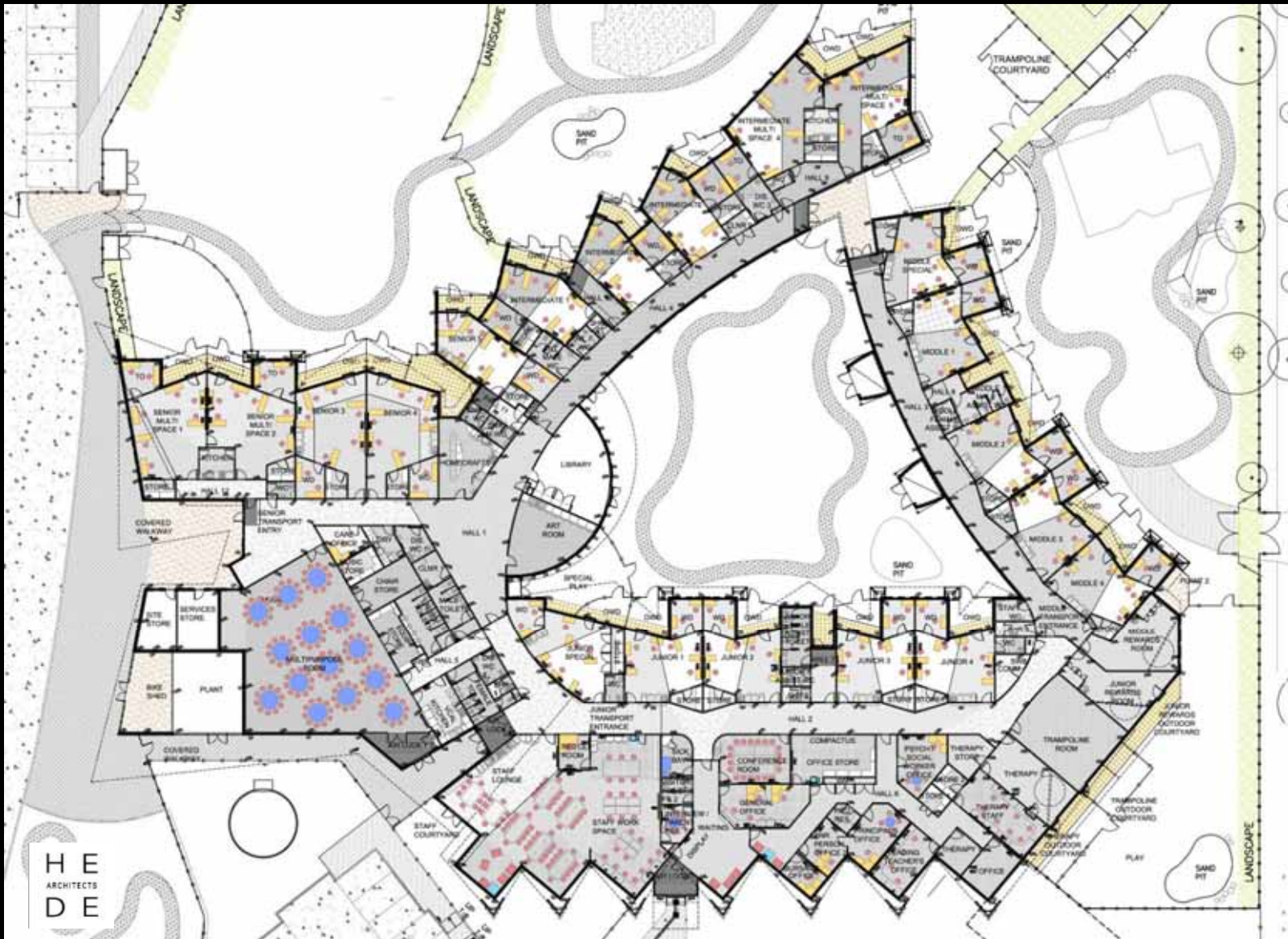


# AUSTRALIA

## NORTHERN SCHOOL FOR AUTISM

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# AUSTRALIA

## NORTHERN SCHOOL FOR AUTISM





# AUSTRALIA

## NORTHERN SCHOOL FOR AUTISM

### Design Principles

- Break up into sub schools
- Natural light
- Separation
- Calming indoor / Outdoor
- Calm colour
- Progression through support life skills
- Safety for teachers with exit routes, supported therapists close by

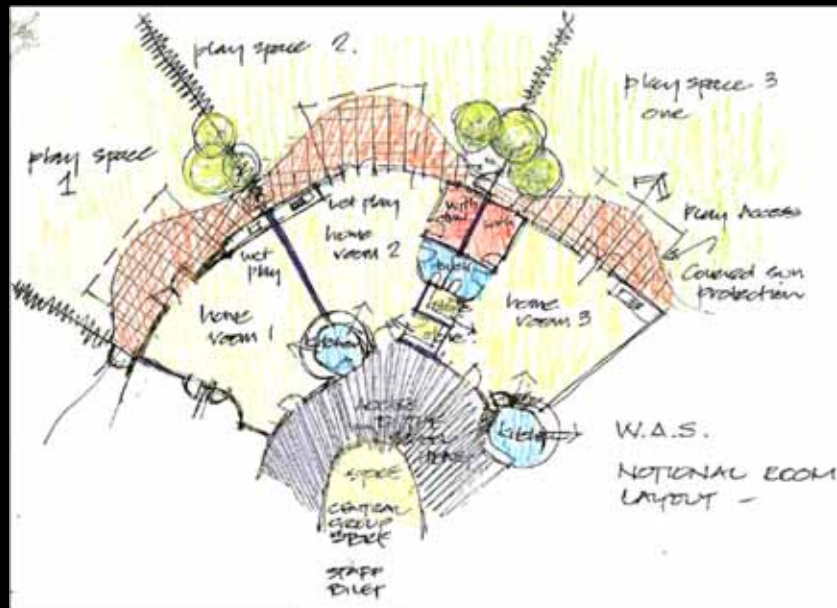
# AUSTRALIA WESTERN AUTISTIC SCHOOL

2011 AUSTRALASIAN CEFPI – NEW CONSTRUCTION - WINNER

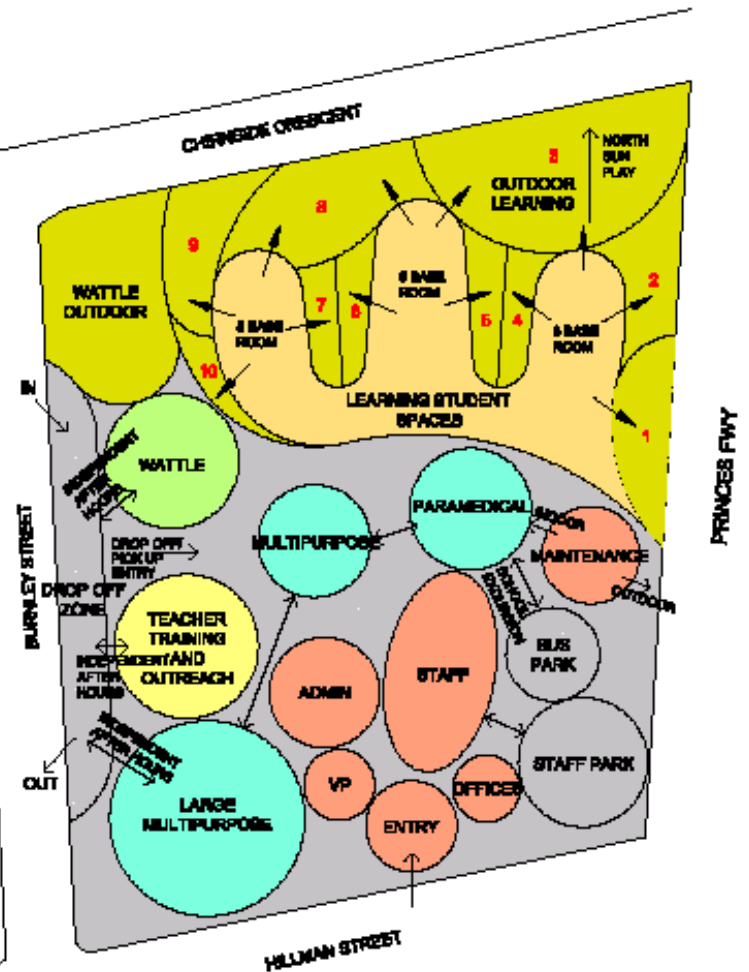


# AUSTRALIA

## WESTERN AUTISTIC SCHOOL



Exploration of  
Learning  
Configurations



ZONING RELATIONSHIPS  
DIAGRAM



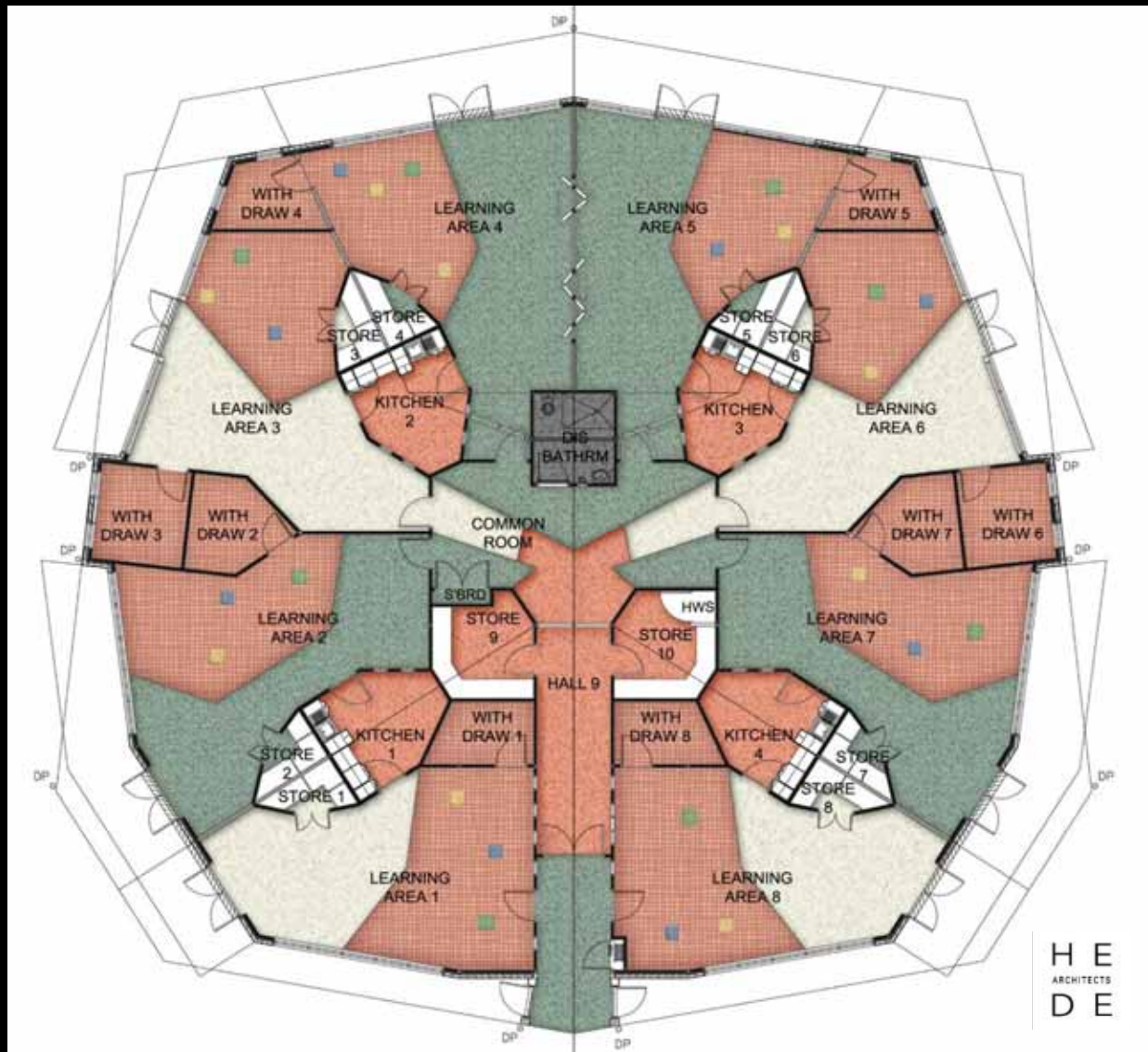
# AUSTRALIA

## WESTERN AUTISTIC SCHOOL



# AUSTRALIA

## WESTERN AUTISTIC SCHOOL



8+ Pod Plan



# AUSTRALIA

## WESTERN AUTISTIC SCHOOL



Central Pod Space



Learning Space within Pod

# AUSTRALIA

## WESTERN AUTISTIC SCHOOL

### 2011 AUSTRALASIAN CEFPI – BEST NEW SCHOOL - WINNER





# AUSTRALIA

## WESTERN AUTISTIC SCHOOL



Foyer / Reception



Colour coded corridors



# AUSTRALIA

## WESTERN AUTISTIC SCHOOL



Central Courtyard



Pod Outdoor Play

- Rounded spaces for safety
- Faces in façade
- Bicycle play highly used by autistic students

# AUSTRALIA

## EASTERN RANGES SCHOOL



### MODEL FOR REUSE / CHANGE TO EXISTING



# AUSTRALIA

## EASTERN RANGES SCHOOL



Recycled school

# AUSTRALIA

## EASTERN RANGES SCHOOL



# AUSTRALIA

## EASTERN RANGES SCHOOL



Recycled classrooms

# AUSTRALIA

## EASTERN RANGES SCHOOL



Parents' Support Spaces / Information



# AUSTRALIA

## EASTERN RANGES SCHOOL



Typical learning area, indoor / outdoor



# AUSTRALIA

# MERRIANG SPECIALIST SCHOOL



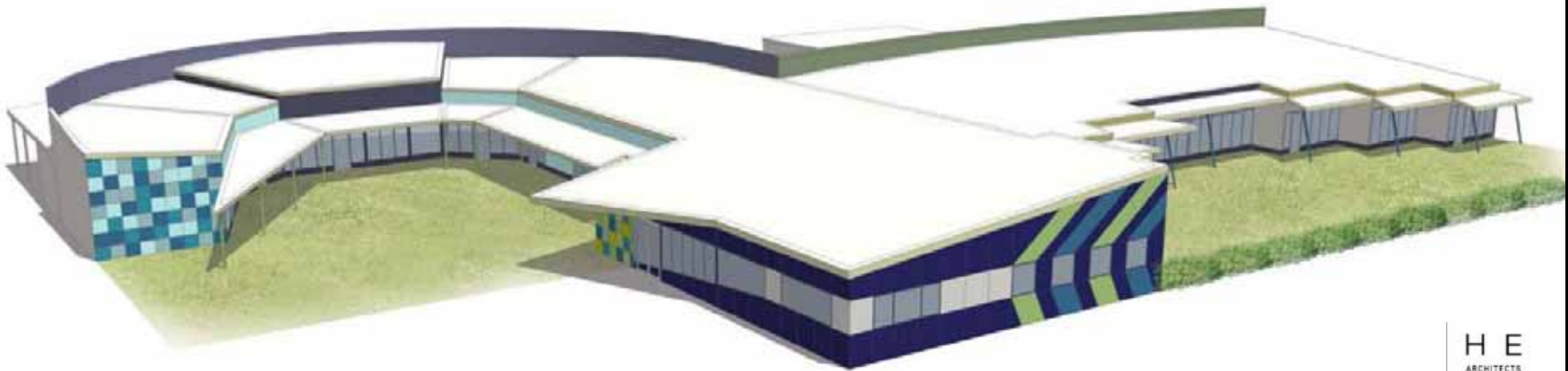
# AUSTRALIA MERRIANG SPECIALIST SCHOOL COMMUNITY MIXED USE



- Sub school breakup
- Respite Care after hours
- Indoor / outdoor play & learning / life Skills training
- Community use on weekends

# AUSTRALIA

## MERRIANG SPECIALIST SCHOOL



HE  
ARCHITECTS  
DE

# AUSTRALIA

## MERRIANG SPECIALIST SCHOOL



Junior sub school

Indoor / outdoor calming and learning



Senior sub school



# AUSTRALIA

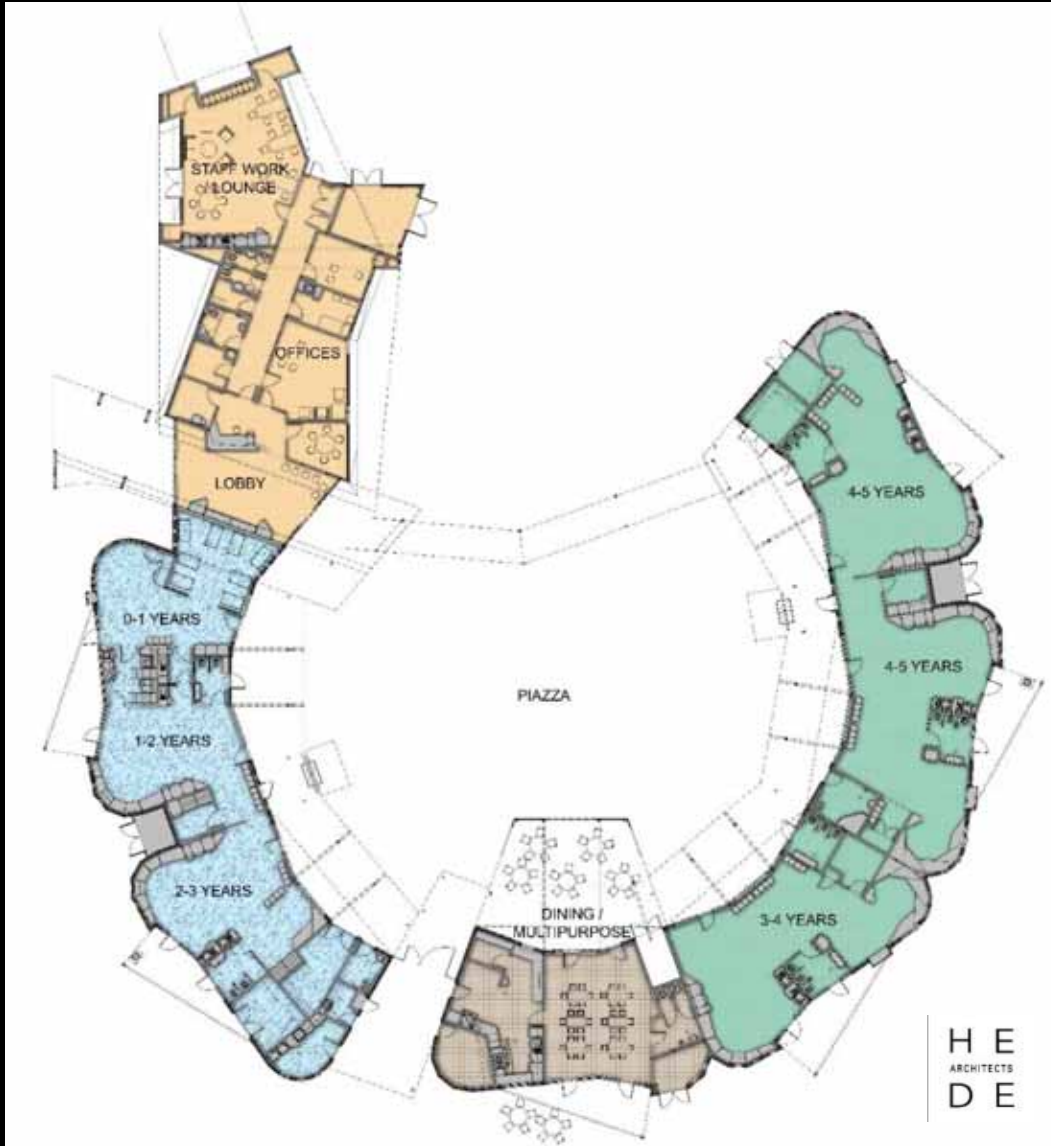
## MERRIANG SPECIALIST SCHOOL



Typical learning area – kitchenette, indoor outdoor, time out

# AUSTRALIA

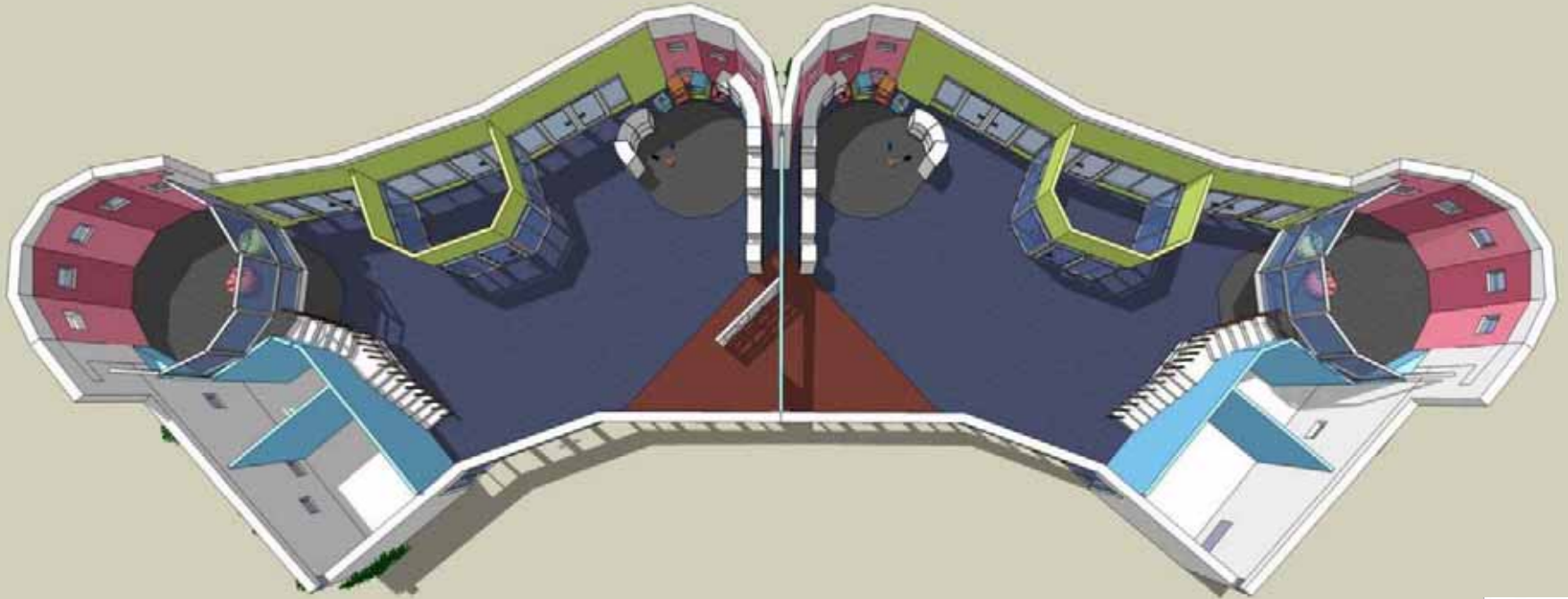
## WESTBOURNE GRAMMAR SCHOOL



Reggio Emilia –  
Disabled friendly design

# AUSTRALIA

## WESTBOURNE GRAMMAR SCHOOL



HE  
ARCHITECTS  
DE



# AUSTRALIA

## WESTBOURNE GRAMMAR SCHOOL





# AUSTRALIA

## WESTBOURNE GRAMMAR SCHOOL



Nooks / Reading Corner / Free Play / Learning Child Initiated

# AUSTRALIA

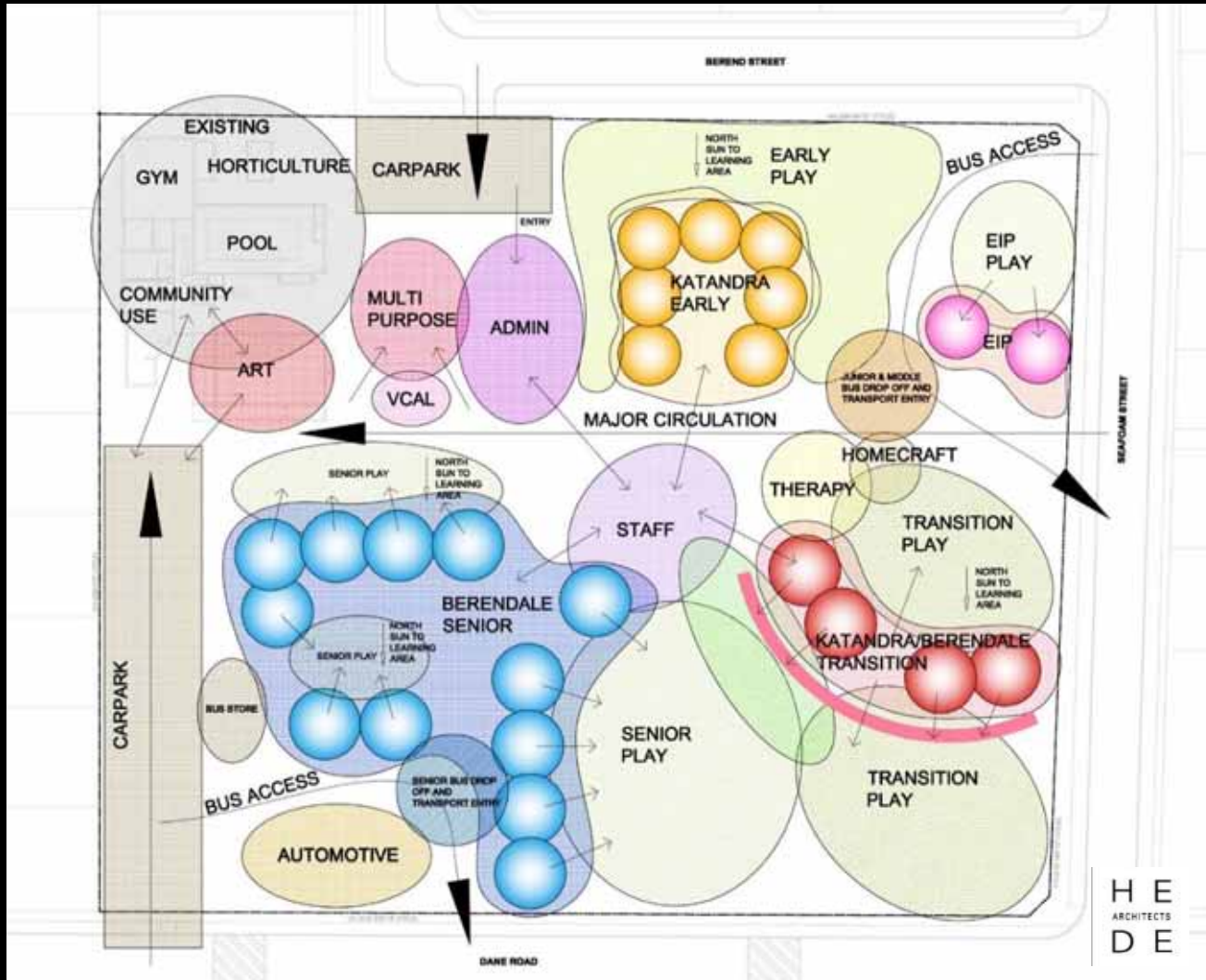
## WESTBOURNE GRAMMAR SCHOOL



Free arrangements of space offering disabled children spaces that suit them

# AUSTRALIA BERENDALE KATANDRA SPECIAL SCHOOL

New school added to life skills training centre



Sub school layout / indoor outdoor / support central / life & employment skills



# AUSTRALIA BERENDALE KATANDRA SPECIAL SCHOOL





# SCANDINAVIA

## SPECIAL SCHOOL, DENMARK



1. Early years preparation
2. Easing students into school
3. Parents drop in

# SCANDINAVIA

# HOMEHOF SECONDARY SCHOOL

Mainstream School - Disabled Students Base



School offering base to disabled students in spare school spaces

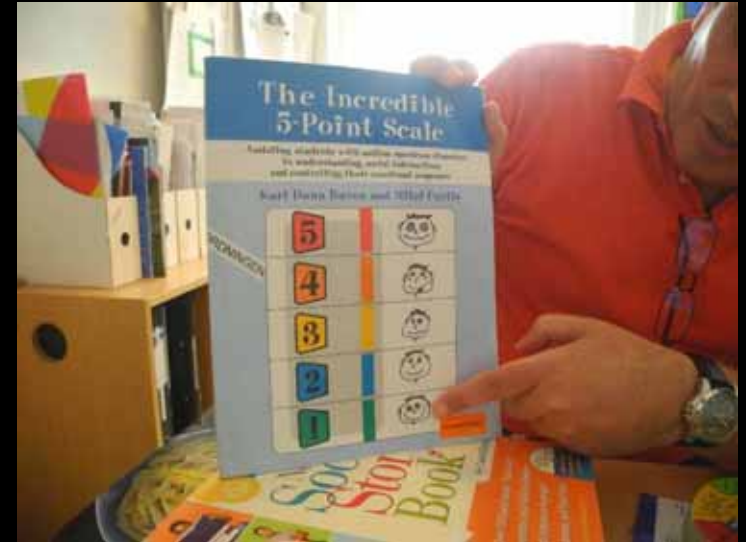
# SCANDINAVIA

## HOMEHOF SECONDARY SCHOOL

Denmark

Mainstream School

- Student Modulated Inclusion
- Mood & brain education for disabled student
- A range of spaces controlled by the students





# SCANDINAVIA

## SPECIALISTERN, DENMARK

Specialisternes 2012			
MANDAG			
9:00	Middag	ANH	M. Kasper, Rosa, Emil
	Udvalgt	APA	2. Jean P., Lars, Johannes, Rasmus, Mikkel
	Middag	CRH	K2. Sofie, Angelo, Frederik, Alexander
	Videnskabs & Teknik	FVI	L. Marc R., Magnus, Dennis, Mark U.
	Strategi	LAM	3. Ole, Jacob, Lasse, Tobias, Jørgen, Patrick P., Prætorius
	Arcade	HEL	5. Emil G., Georg, Nicklas
	Selvstudium	-	Kasper
	Praktik	-	Emil F., Nicklas
11:15	Gåse		
11:30	FROKOST		
12:45	NB: Alle jager fra for frokost forresten fra 12:45 til 13:00		
13:00	Coaching	APA	Johannes, Mikkel
	Coaching	ANH	Frederik, Emil G., Lasse, Emil
	Coaching	CRH	Sofie, Emil E., Dennis
	Coaching	HEL	Alexander, Rasmus, Tobias, Jesper
	Coaching	LAM	Lars, Rosa, Marc R., Mark U., Kasper, Jean P.
	Coaching	FVI	Angelo, Magnus, Ole, Jacob, Georg
	Coaching	CAC	Nicklas, Emil, Emil J.
14:00	AFSLUTNING		



- Adults with Autism
- Special Unique Skills offered
- Training “consultants” - Order
- Hoping for 5000 placements

- Lego success story
- Ultimate success is an employed place
- Operating 13 countries



# SCANDINAVIA

## SPECIALISTERN, DENMARK



Student winning entries

# SCANDINAVIA

## HELLEROD SCHOOL, DENMARK



A new type of school



Variable student  
Controlled spaces

# SCANDINAVIA

## HELLEROD SCHOOL, DENMARK



The learning stair



Optional Breakout



# SCANDINAVIA

SVENSKA SKOLAN SCHOOL FOR  
BLIND, FINLAND



A school and residence for the blind in an apartment building



# SCANDINAVIA

SVENSKA SKOLAN SCHOOL FOR  
BLIND, FINLAND



Striped floors



Sound & colour control

# SCANDINAVIA

## SVENSKA SKOLAN SCHOOL FOR BLIND, FINLAND

Parents / students live in – convertible building



# SCANDINAVIA

SAUNALAHDEN KOULU,  
ESPOO FINLAND



A new type of school



# SCANDINAVIA

## SAUNALAHDEN KOULU, ESPOO FINLAND





# SAUNALAHDEN KOULU, ESPOO FINLAND



# SCANDINAVIA

## SAUNALAHDEN KOULU, ESPOO FINLAND



- 32 disabled students currently attending
- A base room for them centred in the school



# SCANDINAVIA

## SAUNALAHDEN KOULU, ESPOO FINLAND





# SCANDINAVIA

SAUNALAHDEN KOULU,  
ESPOO FINLAND



Typical classroom

Longer and flexible space



Corridor relax / learning



# USA

## GATEWAY SCHOOL, NEW YORK CITY



Entry / stair transition



Reading nook



Stair from below

Central hub to space between  
learning sub groups

Private special school concentrating  
on language and learning

# USA

## GATEWAY SCHOOL, NEW YORK CITY



Red nook



Reading nook



Indoor gym

Capacity for students to withdraw / calm

# USA

## GATEWAY SCHOOL, NEW YORK CITY



Grandstand space – perimeter meshing



Individual learning in classroom  
Group learning in grandstand



Classroom – blackboard rubber feet

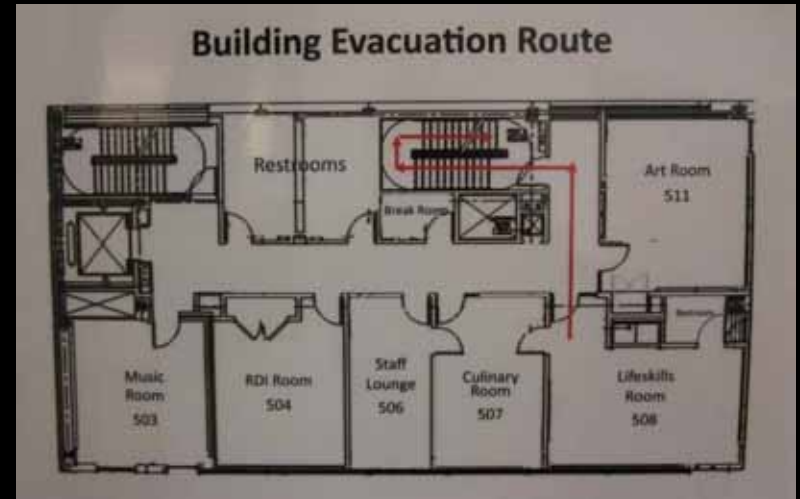


Indoor gym



# USA

## LEARNING SPRING, NEW YORK CITY



A private fee paying school that offers full curriculum and interacts with mainstream schools

Social development a priority

# USA

## LEARNING SPRING, NEW YORK CITY



Classroom



Display nook

# USA

## LEARNING SPRING, NEW YORK CITY



Time out



Therapy



Laboratory



# USA

## LEARNING SPRING, NEW YORK CITY



Outdoor recreation

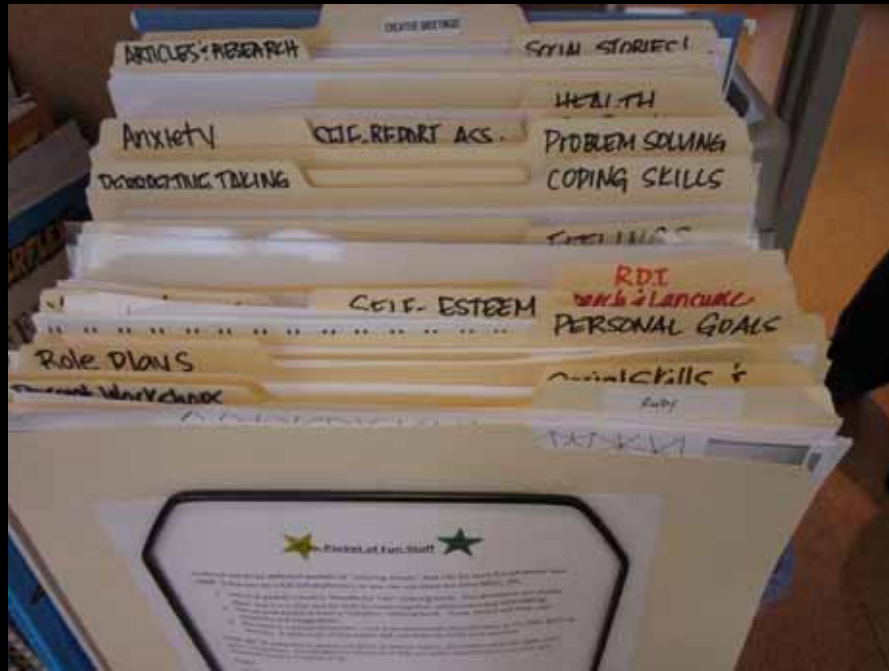


Library

Parent Room

# USA

## LEARNING SPRING, NEW YORK CITY



“Packet of fun stuff”

Support for social learning  
relationship development



Skyscraper Art

Students reflect surroundings

# USA

## ST COLLETTA, WASHINGTON DC



Streetscape imagery



Indoor / Outdoor / Food growing

A private not for profit school for highly disadvantaged disabled students

# USA

## ST COLLETTA, WASHINGTON DC

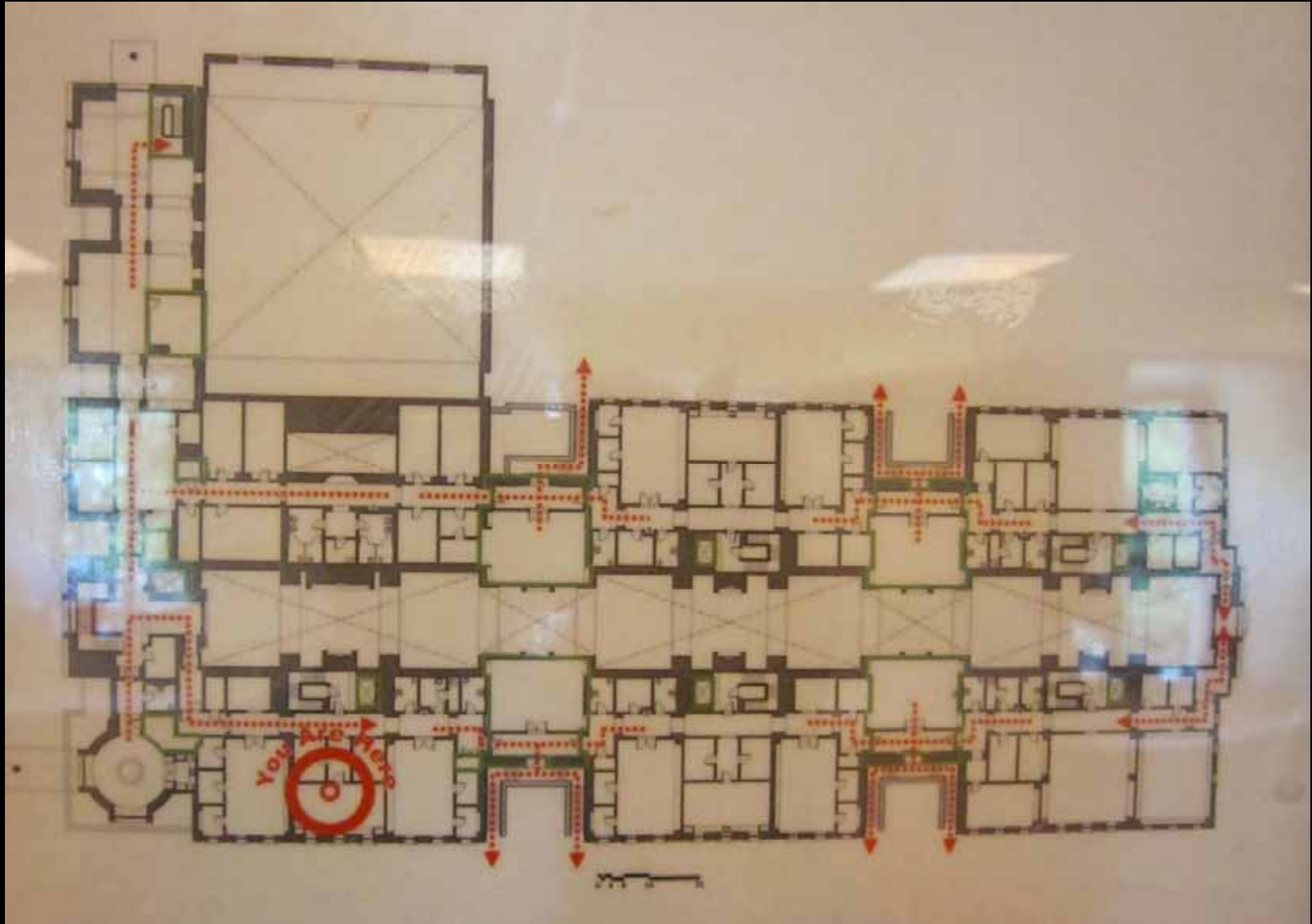
Teaching via Life Skills 'Themes'





USA

ST COLLETTA, WASHINGTON DC



# USA

## ST COLLETTA, WASHINGTON DC



Halls of wisdom imagery



Typical learning areas

# QUESTIONS

## IS IT TIME TO LOOK BEYOND DISABILITY AS A QUESTION OF ACCESS

### The Issues

- Emotional access
- Anxiety reduction
- Ability to play a part in a group

### Specialist versus inclusion

Is this really applicable only to disabled students ?

Relationship Education

Disabled Student Control of Inclusion with Support

Parents of Disabled – their support and education

See the Positive Skills of the Disabled

# SPACE PLANNING FOR INCLUSION FOR MAINSTREAM SCHOOL

## RECOMMENDED SUB SCHOOL STRUCTURE

