



# Lego-Based Therapy

# What is LEGO Therapy?

- Developed 15 years ago by Daniel LeGoff
- Therapeutic intervention used to support children with social communication & language difficulties
- Evidence base: therapy increased learning and generalisation of social skills and led to a reduction of behavioural concerns (Owens, Granader & Humphrey, 2008)

# Client Group

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- Autistic Spectrum Condition
- Social Communication Difficulties
- Anxiety Conditions (especially social phobia)
- Depression
- Language Difficulties

# Skills to develop

- Turn taking
- Listening
- Fine motor
- Moving between local and global processing
- Showing and explaining to others (descriptive language)
- Sharing
- Joint attention
- Problem solving
- Compromise
- Collaborative play/group work

# Goals of LEGO Therapy

- Verbal & non verbal communication
- Joint attention
- Children ask questions & initiate communication
- Use descriptive language to convey a message
- Repair communication breakdown
- Seek confirmation
- Collaborative problem-solving



# Getting Started

- 3 or 4 students
- 1 or 2 adults
- A specific building project
- Children introduced to LEGO rules and roles
- Each child is given a role by the group leader





# Planning the session

- Think about the children you are working with and areas they may need particular help in.
- Think about the type of model you will be building – choose an appropriate size and level of the model for the children you are working with.

# Our Role

- Staff should be experienced in working with children with ASC
- Provide support, including visuals, as required by each student
- Model and reinforce social rules based on the needs of students
- Resolve conflicts by redirecting students to use language, negotiation, and compromise to settle their dispute



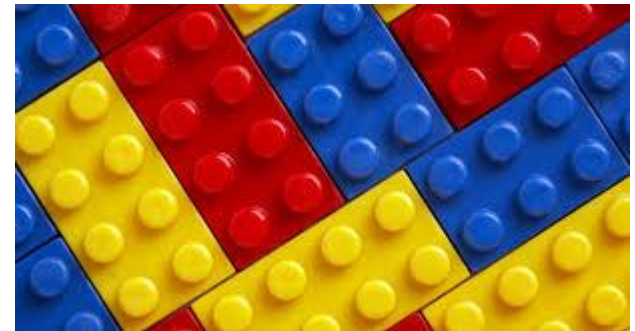
# LEGO Roles

- **The Architect/ Engineer**
  - looks at the instructions
  - decides which LEGO piece he/she needs.
  - He/she then asks the supplier for the appropriate piece.
  
- **The Supplier**
  - is given all the LEGO pieces.
  - He/she listens to the Architect and gives the piece needed to the Builder.
  
- **The Builder**
  - needs to listen to the architect's instructions and puts the pieces where they need to go.
  
- **The Manager/ Observer**
  - watches the group
  - checks off positive social behaviours
  - gives feedback at the end.



# Aims

- Children to work as a team
- Emphasise the areas in which you would like a particular child to focus on.
- Minimal adult intervention as far as possible;



# Rules

1. Build things together!
2. If you break it you have to fix it or ask for help.
3. If someone else is using it, don't take it, ask first.
4. Use indoor voices – no yelling.
5. Use polite words.
6. Clean up and put things back where they came from.
7. We don't put Lego in our mouths.
8. We pass Lego to each other, we don't throw it.

# Problem solving during the group

- ❖ Check the plans, does that look right?
- ❖ Is there another way you could describe that part?
- ❖ Can anyone else help?... what do you think?
- ❖ Where may we have gone wrong?
- ❖ Is that the right size? Check with the Architect how long it is.

# Reflection with the Lego group

- Once the model has been built discuss:
  - ❖ what went well
  - ❖ what could have gone better
  - ❖ if they feel they worked well as a team
- Allow time for children to play with the models at the end.
- Take photos of the models they have built together as a team

# Freestyle Building

- Building using any types of bricks (without instructions) e.g. building a house, a train etc.
- Allowing children the time/space to create what they want
- Can be useful to pair children/students up

# Evaluating the Session

	Never	With prompting	Sometimes	Often
Build model with other children				
Follow LEGO rules				
Use strategies for compromise & negotiation				
Help other children				
Take Turns				
Initiate conversations				
Respond to other children positively				
Show negative behaviour				

# Evaluating our Role

	Never	Sometimes	Often
Praise the children			
Highlight problems to children			
Allow children to come up with their own solutions			
Give time out to a child			
Prompt children to use positive behaviour			
Tell children off			



# Adaptations

## Stepping Down

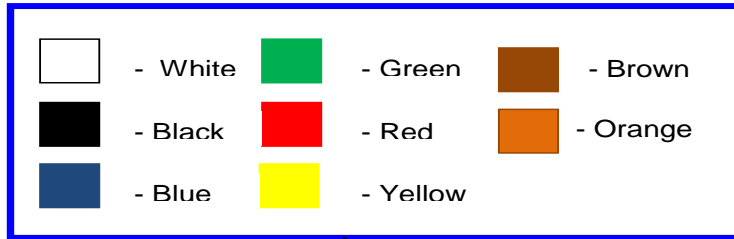
- Supporting through use of **visuals**
- Using lower level LEGO i.e. DUPLO
- Use of PECS or communication books/ boards
- Group required to copy a built model rather than from a set
- Use in other activities e.g. Mr Potato Head

## Generalisation

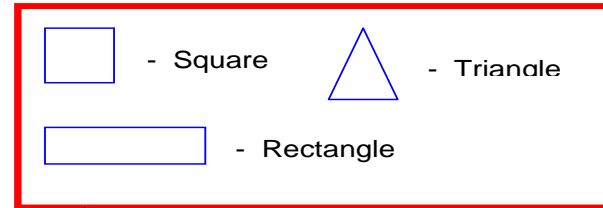
Use of principles in other activities

# Instruction Web

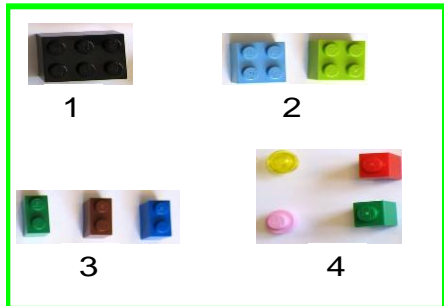
What colour is it?



What shape is it?

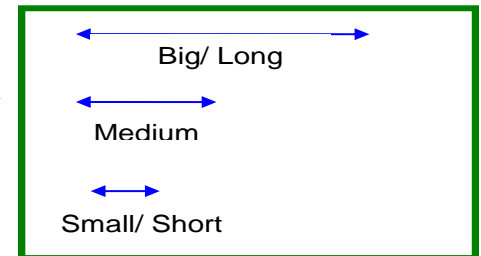


How many pieces are needed?

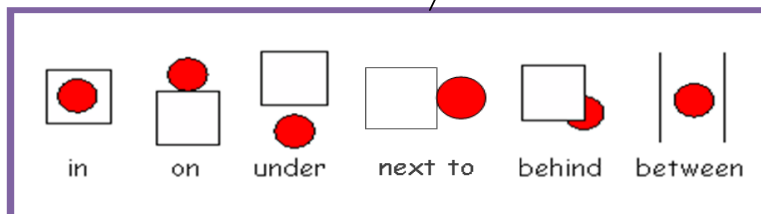


**LEGO THERAPY  
GIVING  
INSTRUCTIONS**

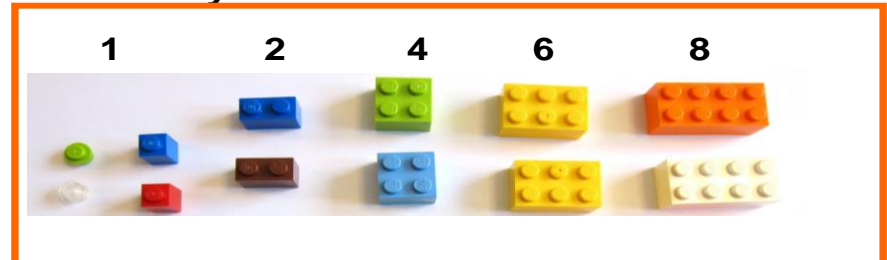
What size is it?



Where do they go?

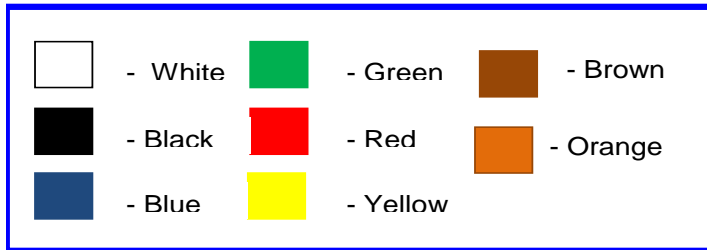


How many studs does it have?

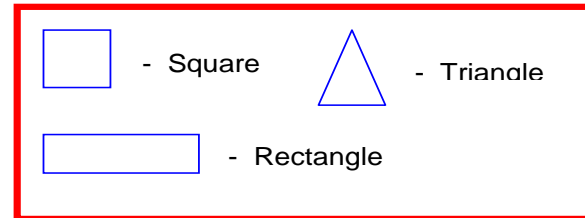


# Instruction Web (Simplified)

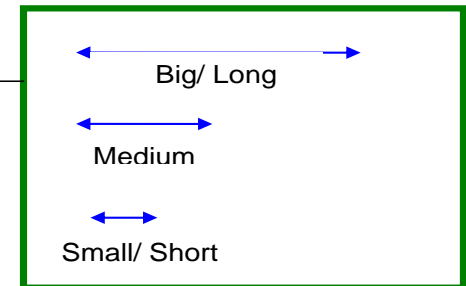
## Colour?



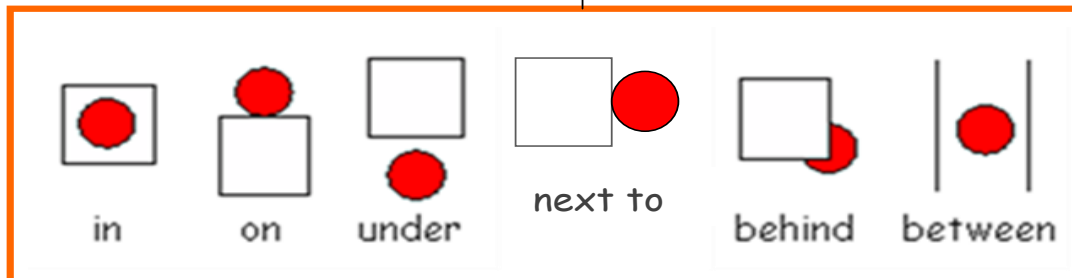
## Shape?



## Size?



## Where?



**LEGO THERAPY  
GIVING  
INSTRUCTIONS**

# Naming Bricks



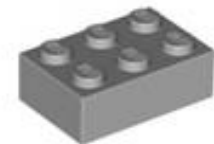
Name: Brick 1x1 - black



Name: Brick 2x1 - blue



Name: Brick 2x2 - white



Name: Brick 2x3 - grey



Name: Brick 2x4 - red



Name: Brick 2x6 - yellow



Name: Flat board



Name: Axles



Name: Corners



Name: Circles



Name: Arches



Name: Wheel



Name: Flat 2x6 - black



Name: Slopes



Name: Specials - rod, light, small brick



Name: Studs

# Lego Therapy – how I can ask for what I need.

Please can I have the \_\_\_\_\_?

Can you find the \_\_\_\_\_?

Please pass me the \_\_\_\_\_.

Can you help me?

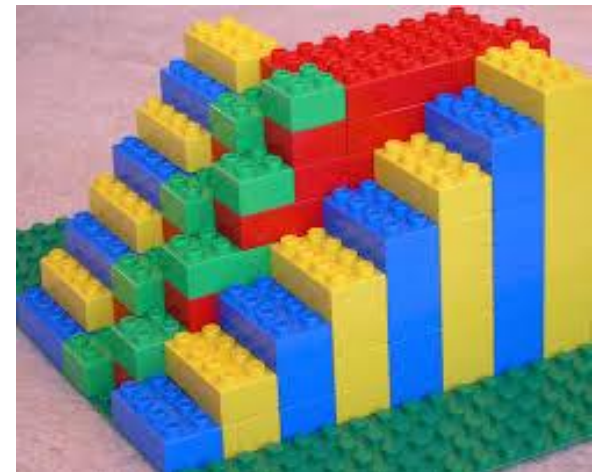
# Subsequent Sessions

- Review the rules and the roles at the start of each session.
- Recap the previous session by praising each student individually and having a brief discussion about any problems that arose.
- As students get used to adults praising them for the good behaviours they are demonstrating, you can start encouraging them to praise each other.



# Steps to Success

- Make it age appropriate and achievable for students
- Can let students choose the project
- Recap each week the roles of each job
- Students swap roles each week
- Keep record of roles to ensure everyone gets a turn
- Individualise student targets





**Any Questions...?**



# References

LeGoff, D.B et al. (2014) *LEGO-Based Therapy: How to Build Social Competence Through LEGO-Based Clubs for Children with Autism and Related Conditions*. Jessica Kingsley Pub.

LeGoff, D.B., and Sherman, M. (2006) “Long-term outcome of social skills intervention based on interactive LEGO play,” *Autism* 10, 4, 1-31

LeGoff, D.B., Krauss, G.W., and Levin Allen, S. (2010) “LEGO Play Therapy for Children with Autistic Disorders.” In A.A. Drewes and C.E. Schaefer (eds) *School-Based Play Therapy* (Second Edition). Hoboken, NJ:John Wiley.

Owens, G., Grandader, Y., Humphrey, A., and Baron-Cohen, S. (2008) “LEGO Therapy and the Social Use of Language Programme: An evaluation of two social skills interventions for children with high functioning autism and Asperger syndrome.” *Journal of Autism and Developmental Disorders* 38,10, 1944-1957

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