



ASD on the Mat: Teaching Methods

Introduction

This resource is intended to support instructors working with individuals with Autism Spectrum Disorder. Autism Spectrum Disorder (ASD) is a developmental disorder characterized by deficits in communication and social skills alongside the manifestation of restrictive and repetitive behaviors that impede daily life (Maenner et al., 2023). These deficits may impede a student's ability to effectively learn without additional learning supports. Instructors should work with student's families/caregivers to establish the student's strengths and areas of need for learning in the group setting. Please refer to the ASD on the Mat: Parent Questions resource for instructors for recommendations on beginning these conversations.

When teaching a Judo class, instructors often demonstrate a technique and explain each step before dismissing the class to go practice. This structure works well for students who can follow multi-step instructions, manage their behavior without direct supervision, and imitate actions with accuracy. Individuals with autism often struggle with all three of these skills. Below are some techniques to supplement and/or adjust the classic class structure and teaching methods of Judo classes.

Prompting

In addition to demonstrations and instructions, most students need prompts when learning new techniques or making adjustments to known techniques. Prompts are additional assistance given to learners to help them correctly respond to an instruction. These take many forms including physical prompts, instructor model, gestures, directives, visuals, and leading statements/questions. Descriptions and examples of applications are below:

- **Physical prompts:** Also known as hand-over-hand, physical prompting is the most assertive support as it is performed by an instructor physically guiding the learner so that they move or manipulate objects accurately. These are appropriate for learners who have poor imitation skills, are not receptive to less assertive prompting, or are learning a skill for the first time. It is not appropriate to use when a student withdraws assent to being touched or moved.

E.g. Physically moving a student's hand to the correct grip position on the lapel;
Pushing a student's elbow up to the proper kuzushi position.

- **Instructor model:** Model prompts are less assertive than physical prompts and are just as they sound—the instructor models the action so the learner can imitate. Model prompts are often accompanied by instructions on how to perform the skill as the instructor models. This prompting strategy is effective for independent skills such as ukemi, motor skills, and grip placements. Students must have adequate imitation skills and working memory for these prompts to be effective.

E.g. An instructor steps forward with their left foot to model stepping in for O-soto-gari.

- **Gestures:** Gesture prompts are prompts that guide the learner to the correct response by indicating where, what, or how they should move; by identifying an object, person, or body part; or by providing non vocal communications (think: exaggerated body language). In judo, gesture prompts are ideal for supporting learners who do not need physical or model prompts. Oftentimes, gesture prompts will accompany instructions or directive prompts.

E.g. Pointing to the spot on the mat where a student should step; pointing to the hand a student needs to use then to where they should place it.

- **Directives:** Directive prompts are instructions that give the learner guidance for the correct response by directing them to complete some or all of the task.

E.g. Saying "Use your other foot" while a student is stepping in for a throw.

- **Visuals:** Visual supports offer a variety of prompting methods as they can be textual cues, pictures, or markings (think: lines or squares on the floor). Visual prompts are particularly helpful when first teaching foot placement for throws or reminding students of how to do exercises so that repeated explicit instruction is not necessary.

E.g. Footprints on the floor to designate where a student should step during a technique; a word bank of throws for a student to use when identifying a demonstrated throw; pictures of steps of a technique for a student to refer to during individual practice.

- **Leading statements/questions:** We commonly use leading statements and questions to have our students problem solve in order to come to the correct response on their own. These prompts are statements or questions in addition to the original instruction or question that guide the learner to the correct response. These can include giving

support. Additionally, it is normal to use more than one prompting strategy at once. Pairing prompts by giving a directive and gesturing at the same time makes things clearer for students and teaches students what less assertive prompts mean, as this is not always understood without specific instruction.

Prompting is fluid and each student will require different levels of prompting and for different periods of time. It is normal for a student to be able to demonstrate a technique independently one class but need directives again the next. This is not a failure of teaching nor learning, this is part of the learning process. Students will develop independence with skills in their own time so it is the instructor's job to strategically provide support while still challenging the student to improve their skills.

Adjusting Teaching Structures to Support Neurodivergent Learners

The classic warm up, instruction, uchikomi, randori class structure may not support neurodivergent learners due to executive functioning deficits and poor imitation skills. As such, a restructuring of elements of your class may be necessary to support learners with ASD and other neurodivergent students.

Break up Instruction

Should students have difficulty sustaining attention during a lesson, do not expect them to be able to sit through the whole lesson. This only impedes their learning and makes your life more difficult as an instructor because this can lead to students engaging in undesired behaviors during the lesson. Instead, break your lesson up into smaller, more manageable chunks. When using a structured teaching method with instruction time then practice time, limit your instruction time to 2 to 3 minutes then provide 3 to 5 minutes of practice time. Repeat this until you have taught the technique in full and then allow for longer periods of practice with instructor guidance.

Keep Instructions Short

Individuals with ASD often have executive functioning deficits that present as difficulties following multi-step instructions and/or recalling instructions. Giving single-step instructions will help prevent students from getting overwhelmed and help ensure students are successful following the instructions they are given. A rule of thumb: If your instruction has 2 or more actions, it has more than one step.

Shape Skills

Possibly the most crucial technique on this list is shaping students' skills. Instructors need to slowly develop students' accuracy and fluency with skills over time and reward students

for each step of progress they make on the road to success. This can be done in a variety of ways including in a progression teaching style and by gradually developing more accurate approximations of skills over time. This is commonly used as instructors teach the basics of a throw then provide feedback on how to improve a student's technique. Focusing on one element of a technique at a time until the student can fluently perform it with accuracy is critical when working with more severely impacted learners because students with ASD often need frequent and consistent repetition to develop and maintain skills. Asking these students to refine many skills all at once is less likely to lead to success and is more likely to lead to student frustration or possibly a regression in developed skills.

Teaching is personal

Just as learning styles vary from person to person, teaching styles are unique to each instructor. You will be more comfortable with some teaching methods than others and you will prefer to teach some techniques one way while other instructors may prefer another. The methods explained in this resource are only some of a vast array of teaching methods and cannot be used in a vacuum, so adjust and add your own methods to experiment and find what works best for you and your students. Teaching to your students' strengths will foster an environment in which learning is a team effort, is more successful, and is more rewarding for everyone involved.

References

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