

2.7 Diving

Diving is the projection of the body into flight + half or more rotations to enter into water. Diving can be functional i.e. to enter water either for recreation or in the specific form required for competitive swimming or, can be a challenging 'acrobatic' activity. Diving is an exciting activity and one that the majority of children are anxious to learn. However due to the danger element it is vital that it is taught progressively with close attention to the individual attaining success before going on to more advanced stages, and that group/class sessions are organised for the safe progression of practice.

Essentially these progressions fall into 3 categories:-

- the pre-requisites that teach the elements of the dive and the competences that are necessary to achieve them
- the learning stages towards a basic head first entry
- developments from a basic entry e.g. the racing dive / more advanced dives.

2.7.1 Prerequisites to Diving

Certain skills are required prior to learning to dive either from the poolside, a starting block or a diving board. These are essentially features within 'the dive' that require to be established from the safety point of view before the body is launched from a height and the possibility of injury arises. They include aspects such as submerging and re-surfacing, control of body shape, rotation, inversion and ability to take off powerfully from 2 feet. In addition there are safety elements such as the ability to protect the vulnerable areas of the head and the spine. These pre-requisites include:-

- Swimming ability in 'deep' water; at least 1.8m / fully shoulder depth for learning stages up to plunge dive and stretch height plus 2-3 feet for plain header or basic standing dive entries.
- Putting the face in the water / ability to submerge happily.
- Opening eyes under water; to see where they are going apart from being important for safety, visual cues are important in learning to appreciate the body orientation in the air, on entry and when travelling under water.
- Attaining and holding the 'push and glide' position, for ease of passage through the water, with the arms extended protecting the head for safety.
- Directing the body downwards into the water.
- Resurfacing from the bottom of the pool; either by tucking up and pushing off from the bottom or by raising the head and hands to encourage movement in that direction.
- Inverting the body in water.
- Jumping from 2 feet; so that an even balanced take-off occurs.
- Entering water from height (at least poolside).

Only once the child is able to do all these, are they ready for "poolside diving practices" - prior to that a lot of "in the water" diving practice is required to acquire the skills listed above. Many of these pre-requisites are also in the core aquatic skills. Although many children are keen to learn to dive many are afraid - of the unknown, of hurting themselves,

of not getting back up from the bottom / from depth etc. The teacher must structure practice to help children overcome these fears as well as learn the necessary physical skills of diving.

Below is a list of suggested practices for the “in the water” stage. A lot of these are also of use for other aspects of swimming, or at other times e.g. with beginner swimmers / within core aquatic skills. Obviously not all practices would be required, only a selection as appropriate to the standard and needs of the group.

..... SAFETY

Establish 'pre-requisites' before advancing to diving from the poolside

The majority of these are water confidence and general watermanship practices and progressing through a selection of them should result in pupils that are confident in the water and ready for the ‘poolside’ stages of diving.

Getting used to the face going in the water and opening the eyes.

1. Washing the face / pouring water over.
2. Creating as much splash as possible.
3. Dipping the face in the water.
4. Blowing bubbles underwater.
5. Touching the bottom.
6. Picking up objects.
7. Tracing lines on the pool bottom e.g. round a tile.
8. Writing their name on the bottom.
9. Sitting on the bottom of the pool.
10. In 2's counting partners fingers

Holding the ‘safe’ push and glide position and directing the body downwards and regaining the surface from the bottom

1. Floating face down, with body in stretched position.
2. Push and glide - hold position and stand up.
3. As for 2 but vary the depth and angle of glide.
4. Push and glide through a partner's legs or through a submerged hoop.
5. Glide to bottom, return by turning hands up and raising head slightly.
6. Glide to bottom, return by tucking up, feet on the bottom and pushing up.
7. Surface dives, head first + return to the surface using either number 5 or 6..

Invert the body in the water and take off from 2 feet

1. Handstands.
2. Handstands with take-off from 2 feet - spring out of water - over water - and into water.
3. As above in 2's spring into handstand over a partner's arm.
4. As above, spring into handstand into/out of hoops floating on surface.

Entry from a height and take off from 2 feet

1. Jumping in from poolside.
2. Jumping in using a 2 footed take off aiming for a clean / straight body entry.
3. As above going for height in the air.
4. As above changing body shape in the air, return to straight position for entry.

Work systematically through progressions
... if a pupil is unsuccessful at a practice go BACK a stage

2.7.2 Poolside' Progressions to Plunge Dive

Most usual set of progressions. (Diagrams 1, 2, 3, 4, 7)

- Sitting dive (fall)
- Sitting dive (spring)
- Low crouch
- Open crouch
- Plunge

These are the most logical set of progressions as they are all symmetrical, being evenly balanced on both feet. However some teachers do prefer using the kneeling dive between the sitting dive and the crouch dive. While this is not logical in terms of progression (as it involves changing from a symmetrical and evenly balanced position to an asymmetrical position with one foot forward and one back and then back to a symmetrical position again) many teachers find that the benefits of the kneeling dive and lunge dive and being able to use the back leg to swing upwards and thus get a cleaner entry, compensate for the continuous symmetry and balance of progressing directly with the crouch to the plunge. Thus they find the alternative series of practices below (1) easier to use.

Alternative set (1) of progressions (Diagrams 1, 2, 5, 6, 4, 7)

This alternative set of progressions is useful for children that have difficulty balancing in the low crouch position with their feet flat on the poolside or who have difficulty getting the hips/legs up. This series does have the added complication of going from a symmetric starting position (sitting) to an asymmetric position (kneeling with one foot forwards and lunge) and then back to a symmetric stance (open crouch).

- Sitting dive (fall)
- Sitting dive (spring)
- Kneeling dive
- Lunge dive
- Open crouch
- Plunge

Alternative Progressions (2) for use at a deck level pool (Diagrams 5, 6, 4, 7)

Additional possibilities are also required for deck level pools where the sitting dive is not really feasible as there is not a rail / gutter to put the feet on. Hence the feet simply slide down the wall as the body overbalances. In this instance the sequence would be starting with the kneeling dive. There is one transition from the uneven one foot forward stance to the symmetrical / two footed stance, this occurs between the lunge and the open crouch.

- Kneeling dive
- Lunge dive
- Open crouch
- Plunge

Poolside diving progressions

Sitting (fall)

- sit firmly on the side with the feet on the rail or trough.
- arms should be extended with the head down between them
- trunk should lean forwards towards the water
- **fall** forward slowly keeping the head down
- glide under the water
- aim for an angle of entry of 20-40 degrees
- stretch in the glide position

Diagram 1 - **Sitting (fall)**

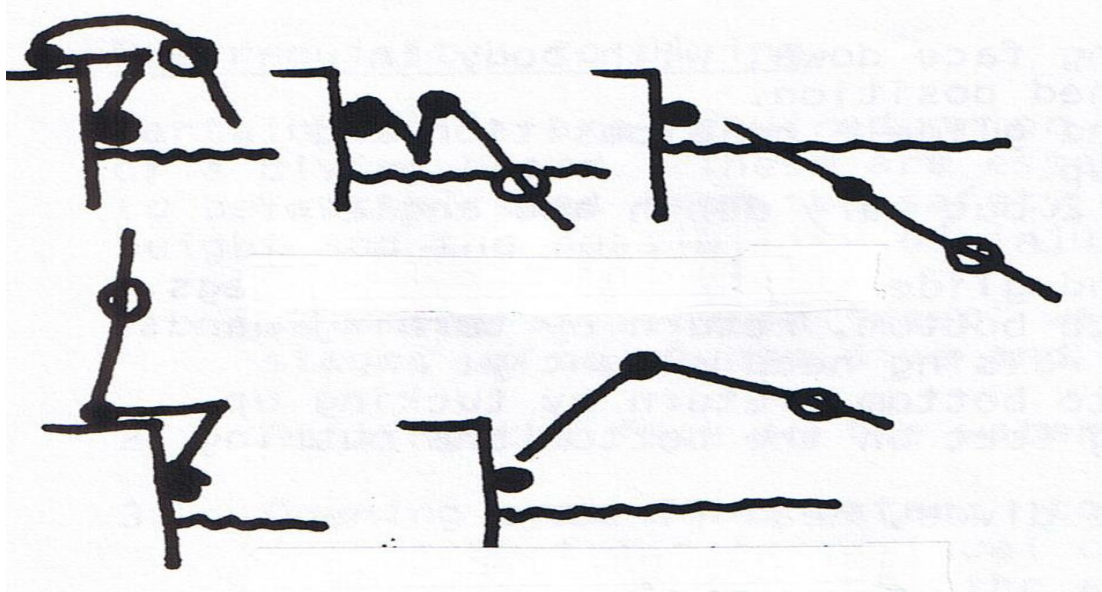


Diagram 2 - **Sitting (spring)**

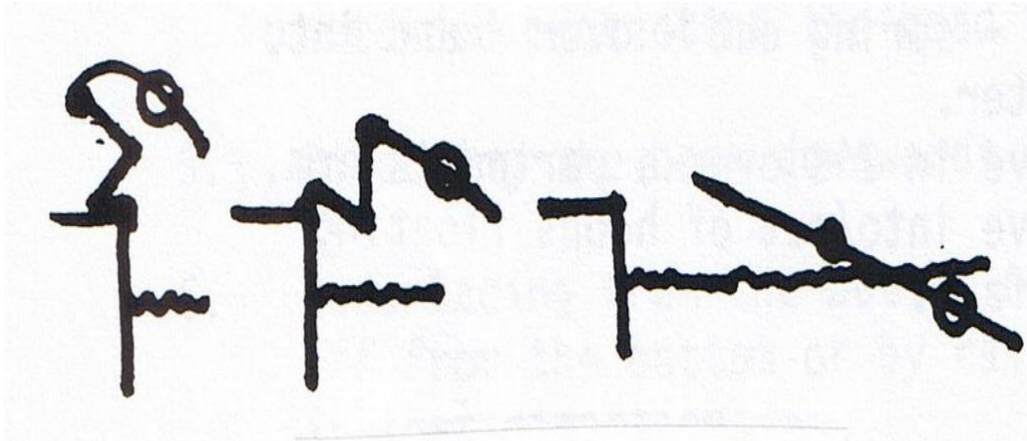
Sitting (spring)

- sit on the side with the body upright
- arms extended above the head
- fall forward
- once the hips have passed the feet the push off starts to drive the body upwards and forwards
- extending the legs to raise the hips and **'spring'** into the water
- keep the head down between the arms

Low crouch

- feet should be about hip width apart, heels must be down on the poolside
- toes curled over the edge
- divers can crouch as low as they wish as long as the feet remain flat on the poolside (the learner should not be up on the balls of the foot as this seriously affects stability)

Diagram 3 - **Low crouch**

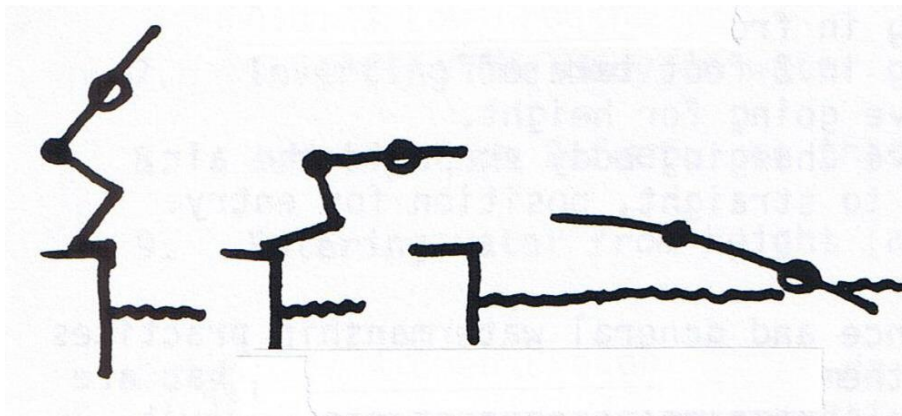


- head should be down between the extended arms
- body overbalances forward until the hips pass the feet and the body is over the water
- legs extend to drive the body forwards towards the water

Open crouch

- This is a slightly higher, more open version of the low crouch.
- Angle of entry should be 20-40°

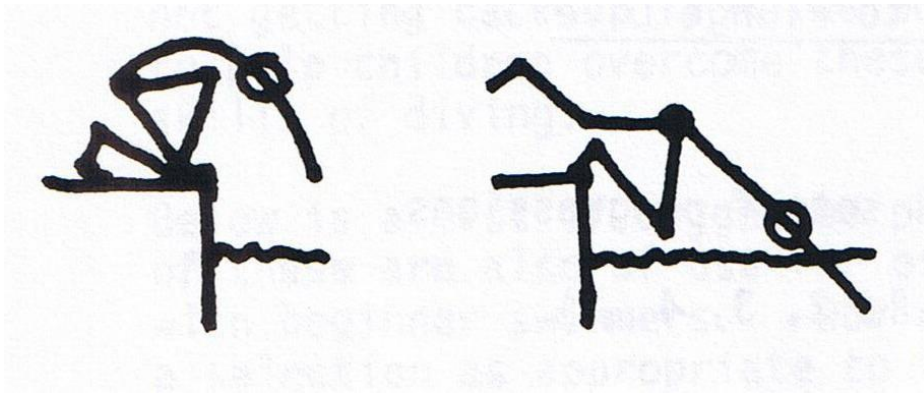
Diagram 4 – **Open crouch**



Kneeling dive

- ensure the toes of the front foot are gripping the edge of the pool
- the toes of the back foot are 'tucked under' with the underside of the toes on the floor
- arms should be extended above the head
- head down between the arms
- lean forward and overbalance towards the water keeping the head down
- hips should be pushed up as the legs get a slight push off from the side
- the back leg helps to raise the hips (important for those learners that have difficulty getting the hips up and head down) as it can gather some momentum from swinging up as it is released from weight bearing before the front foot.

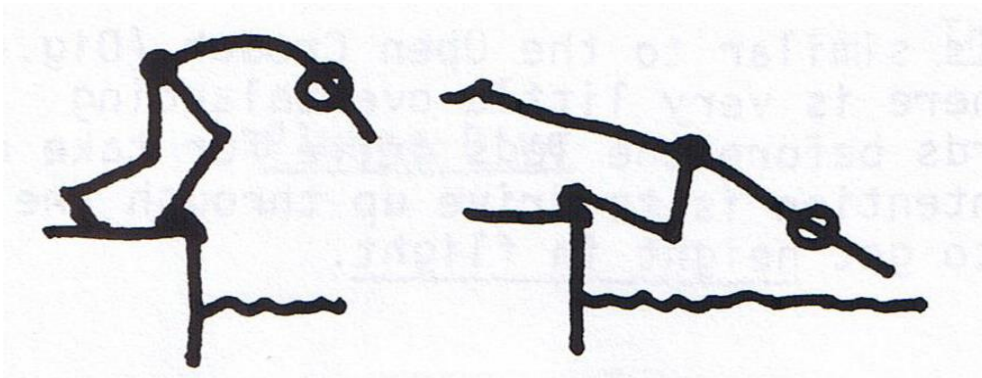
Diagram 5 – **Kneeling dive**



Lunge dive

This is an opening out of the kneeling dive. Check that the foot positions are similar to the kneeling dive. Back leg swings up slightly raising the hips for a clean entry, as the front leg extends to push off from the side. This happens as the body is overbalancing forwards. This staggered foot position transfers well to the track start for competitive swimming later.

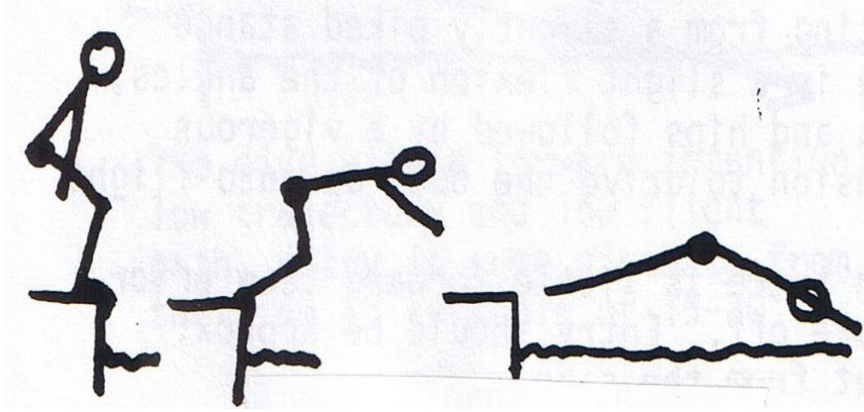
Diagram. 6 – Lunge dive



Plunge dive

This starts in a similar starting position to the open crouch but with the arms by the side. The arms swing forward into the extended position as the body overbalances and the legs drive hard to project the body forwards. The swing of the arms thus also contributes to the forward momentum and distance in the dive. The plunge dive is the basic recognised poolside entry useful for recreational swimming and easily adapted to a racing dive for competition as it has the same forward intention, low flight path, and shallow angle of entry.

Diagram 7 Plunge dive



The sequencing of practices to encourage achievement

The sequencing of practices requires to accommodate the importance of having only a minimum amount of change between one practice and the next. This way of selecting and structuring practices means that the pupil has only one new thing to think about in the new practice. Assuming that they could do the previous practice well they are ready to move on and with minimal change they are almost certain to be successful. Great gaps between one practice and the next involving lots of new things to think about creates a potential chasm of failure ready for the learner to fall into. Do not create any 'chasms' for your pupils to fall into.

Small gap = good chance of success
Big gap / many changes or new things to think about
= the CHASM OF FAILURE

In the table below the **highlighted point** is the 'new' element added to the previous practice.



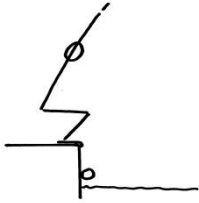
Sitting dive

- starting position close to water
- head protected (and streamlined shape)
- overbalance forward
- keep head down between the arms
- slide into the water hands first ... then head then body
- glide down and forwards



Sitting (spring)

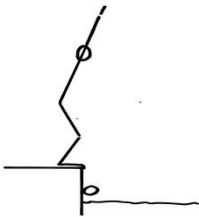
- starting position close to water
- head protected, (and streamlined shape)
- overbalance forward
- keep the head down between the arms
- **once the body is over the water push from the feet once the head and trunk have passed them**
- slide into the water hands first ... then head then body
- glide down and forwards



Low crouch

All instruction as above just starting higher / further from the water

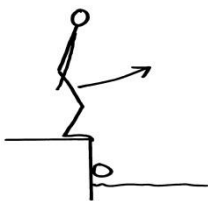
- **starting position a little further away / higher from the water**
- head protected, (and streamlined shape)
- overbalance forward
- keep the head down between the arms
- once the body is over the water push from the feet once the head and trunk have passed them
- slide into the water hands first ... then head then body
- glide down and forwards



Open crouch

All instructions the same as above only the starting position is more open / higher from the water.

- **open / slightly higher starting position**
- head protected, (and streamlined shape)
- overbalance forward
- keep the head down between the arms
- once the body is over the water push from the feet once the head and trunk have passed them
- slide into the water hands first ... then head then body
- glide down and forwards



Plunge dive

Starting position as above except the arms are at the sides and therefore they require to be swung into place protecting the head as the body is overbalancing forwards.

- higher starting position as above but with the **arms by the sides**
- **swing the arms forwards into place to protect the head while overbalancing forward**
- keep the head down between the arms
- once the body is over the water push from the feet once the head and trunk have passed them
- slide into the water hands first ... then head then body
- glide down and forwards

In addition to selecting the appropriate practices for the individual's level of competence it is also important that the organisation of the practice for the individual or group is suitable.

be aware of the depth of the water

In order to do this and to organise the safe teaching of diving the teacher requires to be fully informed of the pool conditions and perform a risk assessment. The teaching of diving, as with other activities, has to ensure that the learners are not put at risk. This means that the learning process, which due to the nature of learning and the fact that learners do make mistakes, has to allow for those mistakes.

The learning process must allow for the learner making errors
..... without being in danger

It is not acceptable that if a learner gets the movement slightly wrong, which is quite possible when they are inexperienced, that they end up paralysed due to a head or spinal injury. Thus the practices must always allow for the learner to make an error and still not be in danger. This is particularly important in relation to the depth of water. If the learner goes in a bit more steeply than planned they must not 'hit' the bottom and injure themselves. Thus the depth of water must always be greater than the depth it is planned that the learner should go to. For the learning stages the basic depth for diving from the poolside should be 1.8m. This allows for error on the part of the learner without putting them at risk.

This requires knowledge of and assessment of the interaction between the:

- Water depth - the minimum depth for diving e.g. learning to dive is 1.8m (3.4m for using a 1m board, 3.7m for using a 3m / 5m board.) Common sense should prevail e.g. large adults require greater depth than small children. A tall man learning to dive (e.g. someone who is 6ft 6" tall and therefore has a 'stretch height', i.e. his height with his arms stretched up and his toes pointed, of around 8ft 6") requires even greater depth than the recommended 1.8m to be safe should he make an error. As well as adequate depth for diving, the diver also requires adequate space in front of them (i.e. forward clearance). The forward clearance requirement is 7.6m due to the forward momentum of the shallow entry dive. Racing dives are a special issue and the dives used in competitive swimming into 'shallow water' / the shallow end of the pool are only suitable for those who have already learned to dive in deeper water, have acquired **absolute consistency** in their angle / depth of entry and are aware of the risks involved and the care required.
- Organisation of practice to include
 - Clearly designated diving area preferably roped off
 - Sequence of who dives when
 - Clear entry area
 - Exit routes
- Technique of the dive

- Suitable progressions for ability level

Aspects that are of importance are:

- the grouping of the class correctly so that the tasks are suited to ability
- the disciplining of the class – fooling around / lack of concentration or attention to instructions leads to injury to self or to others as divers collide etc. due to lack of attention to spacing, order of diving etc.
- placing of pupils in the correct depth for the task / their ability
- organisation of numbers / space so that those about to dive have the clear space to do so e.g. they do not dive until their partner is on the side / everyone is out on the side etc.

Question 1: List 4 areas of competence that the learner requires before they start learning to dive from the poolside.

1.

2.

3.

4.

Task: Specify which type of pool (deck level / traditional) you teach in and then state which sequence of poolside progression you would use.

Type of pool _____

Sequence of progressions _____

Reason for choice _____

Use of goggles when learning to dive

It is normal to learn to dive without goggles as if the head is not well down between the arms on entry the goggles can be knocked off by the impact with the water or can be pushed into the eye socket. Thus for safety reasons learning to dive should occur without goggles. Once swimmers are competent in diving and consistent in keeping the head down it is possible to perform racing dives wearing goggles as competitive swimmers are seen to do.