

## HOLISTIC GOALTENDING EVALUATIONS

A MODERN EVALUATION MANUAL FOR ASSESSING AND PLANNING HOCKEY GOALTENDER DEVELOPMENT

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**Please note:** This manual is an in-depth review of the whole evaluation system and the science behind it. A simpler overview and guide to using the evaluation toolkit is available





## Introduction

This manual was created for the 2024 National Goaltending Symposium as part of the USA Hockey Goaltending Gold-level certification program. The proposed methodology is intended to shift how the hockey community frames and thinks about evaluations. In this system, the goal is not to rank talent. Rather, the aim is to holistically assess the goaltender's capacity to make decisions and interact with their environment. The end products are actionable feedback and insight that help the athlete develop.

This system is designed and offered for the betterment of goaltending worldwide, and is therefore provided free of charge under *Creative Commons* licensing. Given the ever-changing nature of the game, I invite users to continue this work, adapting, revising, and improving the system as I will continue to do. If you are interested in collaboration or have any questions or feedback, please reach out!

## WHY DO THIS PROJECT?

If you have played or worked in hockey, or any sport for that matter, you are well aware of the difficulty with evaluations. Simply put, we as humans are not designed to effectively quantify skill or predict future talent or ceiling. From inconsistency, to bias, and to the different speeds at which players develop, there are many different reasons why this happens, but we see the effects at the highest levels with "draft busts" and undrafted "late bloomers."

Coaches and organizers have also created a culture where, even at 6 and 7 years of age, we tell players that they are "not good enough." Not only does this discourage players and stunt growth within hockey, but also harms their development as athletes and as human beings. While opportunities within high-performance programs are limited, we have created a more widespread attrition problem in hockey and in goaltending where children are less likely to be involved throughout their teenage and adult years.

So what do we do? This project tries to change the conversation around evaluation and our objectives. Instead of ranking talent and looking at skill as technique, let us instead view the goalie as a complete human being — both mentally and physically — as they solve problems within the sport. And while we still need to select the goalies that best fit our organization, let us ensure that the conversation does not end at "yes" or "no." We must provide feedback and development opportunities, because we never know who could be playing for our team tomorrow.

#### CORE PRINCIPLES

This project aims to shift the way we view and discuss evaluations.

- 1. Let's look at goalies holistically
  - athletes solving a problem in their environment.
- 2. Let's find how goalies fit our organization what are their strengths and areas to develop
- 3. Let's deliver coachable feedback
  - it takes 5 extra minutes to help goalies become more self-aware.



### 1

## RATING SYSTEM & BASELINE COMPARISON

RATHER THAN COMPARE A GOALTENDER to peers who may or may not be in the same evaluation, or on the same level, this the model assesses goaltender's individual strengths and weaknesses by determining whether thev benefit. detriment, or have no effect on their ability to compete in the given situation (e.g. game, scrimmage, drill, etc.), at the given skill level. The output helps the goaltender better understand where they can improve and how they may fit in a given skill level based on the entire competitive environment.

The "ability to compete" may be defined by the following:

- Individual ability to keep pace with play, make saves, and contribute to game progression
- Contribution to team dynamic and environment
- Maintaining a healthy, positive environment around oneself that promotes continued development

Evaluators should look for instances where the athlete excels or struggles against the competition around them, and then identify contributing factors, whether those are specific behaviors, skills, or traits, within an instance of positive or negative performance. As beneficial or detrimental traits become

apparent, those should be rated above or below a baseline rating of o, as seen in *Fig.* 1.

In this model, we do not expect to be able to rate *all* criteria, and we generally expect most to be "Neutral" where the skill is on par with the athlete's competitive environment. According to Goalie Guild founder Justin Goldman, a former USA Hockey NTDP scout, "When you dissect skill, you risk missing everything. Look at the whole package — how they perceive, adapt, and act — and look for what sticks out."

This method does not try to dissect individual skills (e.g. t-pushes and shuffles). Rather, evaluators seek specific actions, behaviors, and outcomes that indicate success or struggle in broader categories (e.g. skating as a sub-skill of movement or play reading as a component of understanding).<sup>2</sup>

If a skill is not readily apparent in the given situation, it should be rated as either "Neutral" or be left blank. To determine which is more appropriate, choose from the following:

 If the given game or situation is not conducive to, or does not involve, a given skill, it should be left blank. For example, a drill scenario containing only shots may not allow assessment of Puck Handling.

*Fig.* 1 — *The baseline rating system.* 

How does the given trait affect the athlete's ability to compete within their current environment?

## -2 Strongly Detrimental

This trait is a strong hindrance to the athlete's ability to compete at the given level.

Possible indicator that the level of competition may not be appropriate for the athlete's current stage of development.

#### \_ | Detrimental

This trait somewhat hinders the athlete's ability to compete at the given level.

## Neutral

This trait neither specifically benefits nor hinders the athlete's ability to compete at the given level. It is suitable for their current environment and competition.

## Ø

#### Null Value / Blank

This trait cannot be assessed or scored in the current evaluation event, and therefore should not factor into the athlete's aggregated scoring. Assessment of this skill should occur through another look or

#### ] - - <del>:</del> :

#### Beneficial

This trait somewhat benefits the athlete's ability to compete at the given level.

## 2 Strongly Beneficial

This trait strongly benefits the athlete's ability to compete at the given level.

Possible indicator that the level of competition may not be appropriate and that the athlete could benefit from stronger competition.

#### RATING SYSTEM & BASELINE COMPARISON

• If the given game or situation does involve a given skill, but a benefit or detriment to play is not noticeable, then the skill should be rated as Neutral. For example, if a play involves movement to a shot, but the goalie is not noticeably ahead or behind the play, the "Skating" and/or "Movement" criteria should be ranked as Neutral.

<sup>1</sup> Nicholas J. D'Errico and Justin Goldman, Interview with Justin Goldman, personal, December 27, 2023.

**<sup>2</sup>** Jesse Welling, "Behavioral Scouting — An Evaluation Tool for Mental Qualities and Mental Skills in Ice Hockey" (thesis, 2013).



#### 2

## **EVALUATION CRITERIA**

Goaltenders, and indeed all humans, interact with their environment through a holistic cycle in which they process stimuli, decide on a course of action, and execute that action. As this cycle repeats, the goaltender develops and improves (see *Fig. 2*).

The criteria in this evaluation model attempt to capture this holistic cycle — how the goaltender's mind and body, and their environment, affect one another within a competitive environment. These three components provide an everchanging feedback loop, a concept in psychology referred to as Perception-Action Coupling.<sup>3</sup>

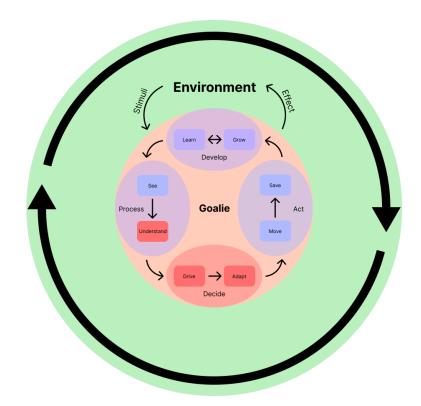


Fig. 2 — The holistic cycle of a goaltender within their environment. This model breaks the three elements of holism — mind, body, and environment — into phases of perception and action when stimuli are received within a game.

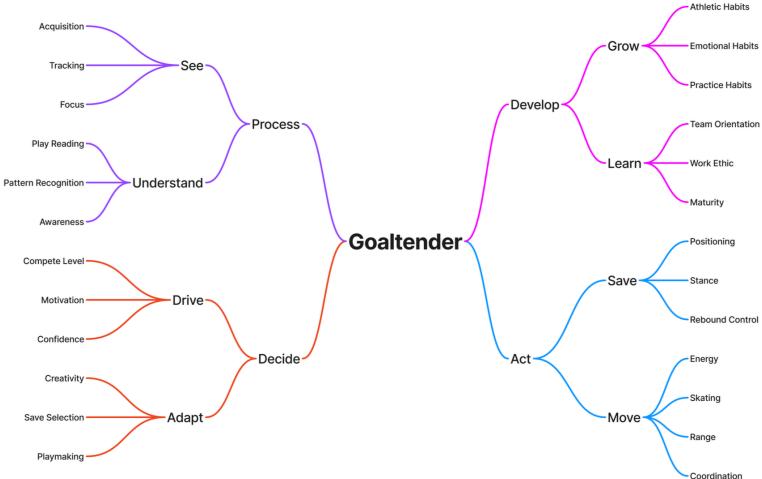


Fig. 3 — A categorized map of the rating criteria for a goaltender. Each phase of the holistic cycle can be mapped to sub-skills and components that often appear in the course of a game.

This concept is a small part of a broader field called Ecological Dynamics — in short, understanding the athlete as a dynamic, living being and using the environment as a teaching tool.<sup>4</sup>

As the goalie receives stimuli from their environment, they must go through a cycle where they *Process* it (*See* and *Understand*), *Decide* on a course of action (pushed by *Drive* and tempered by *Adaptability*), and *Act* in a situationally appropriate manner (*Move* athletically and execute the *Save*). This cycle then has two effects:

- The goalie imparts an effect on their environment with a save, goal, or play, which
  changes the environment and yields a new stimulus that repeats the cycle.
- The goalie uses this cycle to incrementally *Develop* their skills, assessed via their developmental habits (*Grow*) and their openness and capacity for learning (*Learn*).

## Guide to Evaluation Criteria

The following guide is a long-form walkthrough of the criteria. For an abbreviated version to use while evaluating, see our Criteria Cheat Sheet through our website.

#### **Process**

#### SEE

Acquisition: The ability to find/"pick up" the puck, especially after losing sight via screen, behind the net play, after looking off, or after coming off the goaltender's body.

- A flash screen occurs and the goalie acquires sight of the puck by looking around the player's body.
- The puck hits the goalie in the shoulder and goes over the net. The goalie is able to find the puck again quickly and reposition themselves appropriately.

TRACKING: The ability to follow a puck

throughout its motion and trajectory, whether moving from player to player, shot on the goalie, or off of a rebound.

- The goalie is able to track a shot all the way from the player's stick into their chest, dropping their head to follow.
- The goalie is able to follow a point-topoint pass between defensemen.

Focus: The ability to consistently and appropriately switch focus from a narrow view of the puck to a wide range of focus that includes threats and the broader play. Encompasses the goalie's peripheral vision and ability to "look off" to see player positioning.

- A player walks in with the puck and delays the shot. The goalie is able to watch the player's body language in addition to the puck in order to maintain patience for the release.
- The team is stuck in the defensive zone and the offensive team sets up.
   The goalie is able to quickly look off from the puck to assess the player in front, and then look back to the puck.

#### Understand

**PLAY READING:** The ability to read and anticipate plays, and understand how they develop.

- The goalie watches the opposing team begin their breakout and observes how their own team defensively sets up. They're able to anticipate which side of the ice the rush will come from and can mentally prepare their planned course of action.
- The opposing team's rush enters the zone and the goalie's team sets up collapsing zone coverage. Therefore, the goalie expects the shooter to come down the boards and cut in below the dot, mentally preparing them for a post-play situation.

PATTERN RECOGNITION: The ability to recognize patterns within the game, whether it's a repeated play or the trajectory of a shot puck.

 Throughout the course of the game, the opposing team has positioned the center in front of the goalie for tips and backdoor jams. The goalie quickly recognizes this pattern and alters their game plan in response, making sure to get line of sight on the release and kick or absorb rebounds away from the threat in front.

 From watching the release of a specific defender's slap-shot, the goalie knows what to expect regarding its trajectory and can consistently stop the puck within their technique toolkit.

**Awareness:** The ability to rapidly take information about one's surroundings, including an assessment of threats.

- A player positions themselves on the backdoor while another walks in with the puck from the circle. The goalie understands that they may need to sacrifice depth in order to react to a pass.
- The puck is dumped in. The goalie observes, then plays the puck, flicking it to safety in the corner because the forechecker outpaced the defense.

#### **DECIDE**

#### DRIVE

**COMPETE LEVEL:** The desire of the goaltender to battle, whether for playing time, a win, or simply a save on a risky sequence.

- The goaltender's partner was chosen to start the next game. While the goaltender is positive and supportive, they increase effort in order to earn the following start.
- The goaltender faces a 2-on-o.

  Although the puck is passed behind the goaltender and is shot toward an open net, the goaltender still attempts to make the save by diving for the puck.

**MOTIVATION:** The root of the goaltender's motivation (e.g. intrinsic vs extrinsic/ autonomous vs amotivated) and its impact on their performance.

• The goaltender demonstrates a deep, passionate desire to play the position.

• The goaltender is only playing because a parent forced them to do so, and therefore is not bought into practice or the game.

**CONFIDENCE:** The outward demonstration of belief in the goaltender's and the team's potential for success.

• The goaltender is starting the championship game and is confident that the team will win, and that the goaltender will do what it takes to win. They consistently demonstrate that confidence throughout the course of the game.

#### ADAPT

**CREATIVITY:** The ability to change an expected response to a given play or shot, or leverage the unorthodox to make a save or positively affect the play.

 On a breakaway attempt, the player fakes the goalie and dekes around.
 The goalie makes a "scorpion save," using their skate blade to save a slightly-elevated puck.

#### **Evaluation Criteria**

 A player passes a puck through the front of the crease, slightly out of the goalie's reach. The goalie poke-checks their stick out, using the paddle to ramp the puck up and out of danger.

**SAVE SELECTION:** The appropriateness of the selected action or reaction related to the given play, threat, or shot.

- To initiate a line change, the opposing forward puts a half-strength shot from the blue line on the goalie. Rather than simply saving and directing the shot, the goalie changes stick position to deaden the shot and gain control, leading into a puck handle and pass.
- A rush comes down the wing and cuts in between the dot and the bottom of the circle. Rather than using RVH, the goalie elects to overlap to block more space.

**PLAYMAKING:** The ability to capture, control, and move the puck in a manner that allows the team to maintain possession or progress the play.

- The goalie catches a lob coming toward the net. They quickly flatten the puck and execute a pass up to the half-wall where a defender is moving.
- The goalie stops a rim behind the net.

  Knowing that the forechecker is ahead of the defense, they lob the puck into the corner so their team can battle for control.

#### **A**CT

#### Move

**ENERGY:** The capacity for readiness to move, the ability to endure through extended movement, and the preparation for the next consecutive sets of movement.

The team is stuck in the defensive zone on a penalty kill and the goalie is constantly moving to keep up with the play. Once the puck is controlled and iced, the goalie is able to reset and quickly catch their breath, getting ready for the next rush.

**SKATING:** The ability to efficiently and effectively change position, whether forward/backward or laterally, and to execute subsequent movements to keep pace with the play. Includes upward movements and sliding, as well as the ability to maintain edges and quickly decelerate.

- There is a D-to-D pass from point to point. The goalie executes a hard tpush across the top of the crease, arriving in the intended spot on time or slightly ahead.
- The goalie executes a butterfly slide to beat a pass targeting a forward in tight. The player shifts and tips the puck slightly before the anticipated point of reception. The goalie digs an edge to quickly stop their slide and slams their pad down to seal low, blocking the redirect.

RANGE: The body's ability to rotate, reach, and/or extend in order to accomplish the desired objective without necessarily activating whole-system movement.

- The goalie overshoots their movement and a shot goes toward the opposite side of the net. The goalie is able to rotate their torso, lean, and extend the glove-side arm to reach and catch the puck.
- On a low, wide shot to the bottom corner of the net, the goalie is able to rotate their torso and get the stick on the puck to steer it to the corner.
- While the goalie may be undersized, they are able to compensate for that size by appropriately shifting, rotating, and extending to intercept pucks.

**COORDINATION:** The body's ability to execute minute adjustments within small timeframes to maintain efficacy and accomplish objectives.

- On a slow shot that drops over its trajectory, the goalie is able to effectively track and catch the shot within their glove's webbing.
- A shot to the far side is tipped in the opposite direction. The goalie, who is

#### **Evaluation Criteria**

shifting with the initial shot, is able to react and change their shift in order to save the redirect.

#### SAVE

**Positioning:** The ability to maintain proper angle, squareness, and depth to the puck, or to the play as appropriate.

- A defender walks in through the high slot for a shot. The goalie challenges the shot, maintaining proper angle, squareness, and depth to save the shot given their biomechanics (e.g. size) and ability.
- A player walks down the wing and cuts in toward the net at the face-off dot. The goalie follows the player down with small adjustment shuffles and maintains appropriate depth to challenge the shooter, but also be ready for a potential pass across.

**STANCE:** The positioning of body parts and equipment, both when upright and in butterfly, to provide an optimal mix of blocking and ability to move and react.

- The goalie maintains a narrow "mobile" stance so that they can move effectively, with hands off body so that they can rotate.
- When the goalie sets in low stance for a shot, their hands and chest are forward toward the shot, and stick is on the ice.
- When the goalie butterflies, their weight is forward over their knees enabling quick follow-up movements, and their body is forward over the puck to actively intercept it.

**REBOUND CONTROL:** The ability to control the puck and impart direction after it hits the body or equipment.

- A shot that hits the pad is directed toward the corner away from danger.
- A shot off the stick is directed toward the corner or up into the netting.
- A shot off the chest is absorbed for a whistle. If the puck pops out, the goalie is quickly able to find it and cover.

 A bad angle shot is fired 6 inches off the ice, far side. The goalie must cause a rebound, but they control it up the center between forwards and away from any relative danger.

#### **DEVELOP**

#### GROW

**ATHLETIC HABITS:** The athlete's habits, behaviors, and history that help maintain their athletic ability, performance, and well-being.

- The goalie conducts a dynamic warmup off the ice, does some light static stretching during on-ice warmups, and does a cooldown or stretching once the game or practice session has ended.
- Post-game, the goalie rehydrates and asks for nutritious food to help replenish and recover. These good habits manifest in more energy and better compete/play on the ice.

• The goalie has frequent non-contact injuries due to a lack of preparation before play.

**EMOTIONAL HABITS:** Self-guided habits that allow one to channel emotion, desires, needs, and ambitions into positive outcomes.

- The goalie lets in a tough goal. They turn around, drink water, mentally reset, and prepare themselves to be fully engaged in the next play, even if they inwardly feel upset.
- An opposing player elbows the goalie on the way by. The goalie uses this as further motivation to compete and work twice as hard.
- Two players jockey for position in front of the goalie, and the opposing player spears the goalie's defender, causing them to fall in pain. The goalie stands up for their player, sending a message to both teams, and then is able to back off and mentally reset for the next play.
- The goalie is on a new team and is

#### **Evaluation Criteria**

having difficulty understanding a drill, the reasoning behind it, and their role. They are able to pull the coach aside at an appropriate time, self-advocate, ask for clarity, and offer insight on how they learn best.

• The goalie is injured on a play and knows that it would be unwise to continue. Rather than disregarding their symptoms or being "stoic," the goalie signals to the referee and bench that they need assistance and relief in net.

**PRACTICE HABITS:** Self-guided habits that enhance and accelerate one's own learning and development.

- A goal goes in during practice, and the goalie understands that they made a mistake. During a break in action, the goalie repeats the faulty movement several times in order to "iron out" the error and build correct muscle memory.
- The goalie asks deep and insightful questions of coaches and their peers in

order to gain a better understanding of strengths, faults, or the reasoning behind something.

- The goalie watches a video of their favorite goalie and experiments with changes to their stance as a result.
- The goalie receives feedback from a coach and gives an earnest effort to try the recommended change.

#### *LEARN*

**TEAM ORIENTATION:** The ability of the goaltender to effectively communicate with teammates and coaches, and contribute positively to the team dynamic and culture.

- The goaltender establishes common communication with their defense and can call out threats or intent when playing the puck.
- The goaltender is a positive voice in the locker room and takes accountability for their own mistakes.

#### HOLISTIC GOALTENDING EVALUATIONS

**WORK ETHIC:** The demonstration of effort and a desire to continuously learn and develop.

• While the team conducts a skating drill during practice, the goaltender works on their own movement drills and patterns in the crease.

**MATURITY:** The personal capacity for social and emotional growth and the desire to do the right thing in all situations.

- The goalie has had a tough season, both in terms of performance and team fit. Rather than allowing that to negatively affect their mindset and outlook, they frame the experience as a learning and development opportunity.
- The team is engaging in a joke that would be deemed offensive or discriminatory.

  Despite believing they'll be the only one to speak up, the goalie makes their voice heard and declares the behavior unacceptable.

**<sup>3</sup>** Chris Button et al., Dynamics of Skill Acquisition: An Ecological Dynamics Approach (Champaign, IL: Human Kinetics, 2021).

**<sup>4</sup>** Rob Gray, "Key Principles of the Ecological Approach to Skill," Youtube (lecture, Arizona State University), accessed March 1, 2024, https://www.youtube.com/watch?v=-TUjKAwc9Z8.



# 3 Acting on Evaluations

One of the primary objectives of this evaluation system is to easily create insights that provide a development path and forward progress for goaltenders. Evaluators should strive to continue the conversation with goaltenders, even after the evaluation period has ended.

There are myriad benefits to providing even the most basic feedback to the goaltenders you evaluate, even if they do not continue within your organization. Most significantly, this practice elevates the broader goaltending community. All coaches should strive for this shift in developmental philosophy.

## Analyzing Insights

Using the scoring methodology and rating criteria in this manual, it is easy to analyze a goaltender's strengths and for continued development. areas Without any further processing, the baseline rating system should provide a high-level understanding; negative scores are areas of focus, positive scores are strengths, and scores at or near zero are appropriate for the given level of competition (but may also be a desired area for continued development).

However, using a spreadsheet tool such as the one within our online

resource kit, evaluators can leverage radar charts to provide a more helpful visualization of a goaltender's traits (see *Fig. 3*).

In a radar chart like this, the term "well rounded" is quite literal. A goaltender's objective is to rise above the baseline rating of zero while developing skills equally, producing a rounder graph — though it is important to remember that all athletes and humans will still retain distinct strengths and weaknesses.

These charts can be overlaid as a means of direct comparison, aiding with the selection process detailed in Chapter 4: "Making Selections." Additionally, organizations that evaluate for internal

development purposes, such as town hockey or house leagues, can calculate a graph of averages among their group, helping determine organization-wide priorities and season development plans.

### DELIVERING FEEDBACK

The benefit of this evaluation system is that a goaltender's strengths and areas for development are readily accessible, even after a single evaluation. Evaluators can use ratings to identify these positive and negative traits and, in tandem with any written comments, construct valuable, coachable feedback for the athlete. In many cases, this process takes fewer than five minutes.

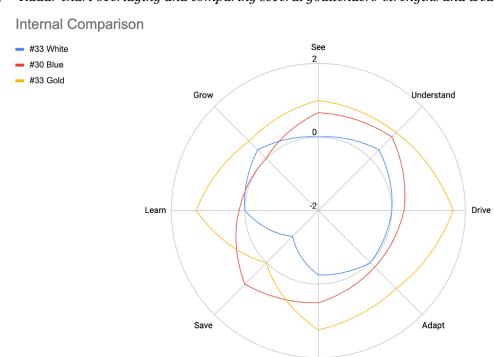


Fig. 3 - Radar chart overlaying and comparing several goaltenders' strengths and weaknesses.

#### **ACTING ON EVALUATIONS**

Note that athletes, especially younger ones, are often intensely focused on quantifiable ratings. They can conflate their self-worth with their numbers, compare against one another, and misunderstand the context behind the evaluations. Therefore, we do not recommend providing the athlete any numbers or charts alongside their feedback.

Fig. 4 is an example of how this feedback may be presented in a digestible, productive, and personal way.

Fig. 4-Example of a feedback form sharing guidance for a goaltender's development.



Organization Name Goalie Feedback/Scouting Report

#### Goalie Name

#### Strengths:

Pattern recognition, Play reading, Being a good teammate

#### Areas of Focus:

Tracking & vision, Athletic habits, Positioning, Emotional habits

#### Comments

It's been a delight to watch how you've grown and improved over the past few years. It's evident that you've put in work as I watch you in goalie clinics now. It's clear you have a passion for the game; you know how to read plays and recognize patterns. As I said to you last year, you seem to just find pucks — we just need to make you more efficient.

From a technique standpoint, efficiency requires two things. First, let's work on our positioning. Angles and depth are off, making saves more difficult than they have to be. Second, let's up our eye game. Through scrimmages, there were a few pucks — and other players — that I know you couldn't see. Take the time this summer to work on some vision drills. We want to improve how we acquire and track targets, and how we can look off the puck to gather information too.

I'd also like to start building up that leg strength and stamina, so let's find some routines to both work out and warm up our legs before games so that they're ready to go. We also need to nail down some emotional routines as well to manage our frustration. The more we can level out our emotions, the better off we'll perform and motivate the team around us.



## 4

## Making Selections

Prevailing scholarship, particularly that which covers talent selection, shows a lack of predictability when it comes to athletic outcomes, particularly when an athlete is younger. According to Dr. Joe Baker, Ph.D. of York University, "Player development systems are poorly designed, inadequately understood, and delivered by humans with brains that are not designed for the task."5 To put it simply, even if we know who is the best athlete today, it is unlikely that they will be the best athlete tomorrow. And, we do not know the pace at which they will progress with the resources afforded to them over the course of this season.

The conversation on evaluations and selection, therefore, must change from ranking talent and skill to choosing based on organizational fit as well as development opportunities given available resources and competencies. Dr. Baker summarizes this by stating, "High-performance sport is a resource-limited system. Evaluations are about making decisions as to who gets access to those resources."

Organizations should start with a realistic self-analysis to understand competencies, resourcing, and need before recruiting any athlete, let alone a goaltender.

# IDENTIFYING ORGANIZATIONAL COMPETENCIES

In order to effectively evaluate fit, an organization must have the self-awareness to understand its own strengths and weaknesses. Leaders and coaches should reflect on the following questions:

- Do we have a goaltending coach or goaltending staff who are able to support individualized development, or can we only develop a goaltender in a broader team context?
- What internal resources do we have to support athlete and goaltender development, such as strength coaches, mental specialists, etc.
- What is our team and organizational culture, and what types of community and support does it foster around goaltenders?
- If age appropriate, what kinds of systems do we teach and what qualities in a goaltender help support those systems?

With those answers in mind, leaders and coaches should then review the earlier map of holistic criteria and come up with their own ratings:

- If the organization needs to prioritize a goaltender with certain traits, those traits should be rated "beneficial" or "strongly beneficial."
- If the organization has the competency to develop certain traits, or if certain traits are less of a priority, the organization should rate those traits as "detrimental" or "strongly detrimental."
- For any uncertainty around traits, or for traits that are not classified using the descriptions above, a "neutral" rating should be used.

Organizations should be as realistic as possible and should seek consensus on these findings among all coaches and leaders. If a majority of traits are weighted toward the same side of the scale, the organization should revisit its findings. As is discussed in Chapter 5: Scaling Evaluations, goaltenders who

rate "detrimental" in most traits may not be ready for your organization's skill level; likewise, goaltenders who rate "beneficial" in most may be above the skill level of your team, and may not want to play for your organization if higherlevel opportunities are available.

## FINDING A GOALTENDER WHO FITS

An organization can use its own ratings to formulate its own radar chart, which can then overlay those of the evaluated goaltenders.

The objective of this comparison is to find goaltenders' charts that closely match the organization's competencies at an appropriate skill level. It is important to note that goaltenders whose charts are entirely above or below the baseline grid mark may not be appropriate for the organization's given level of competition. This is especially true if the goaltender has been evaluated within an environment that includes the team's current or future players (e.g. in a

training camp scrimmage or during a mid-season practice tryout).

Goaltenders who are within the baseline likely cannot yet compete at the organization's level; meanwhile, those who exceed the baseline are likely above the level of competition. While an organization may still want to extend an offer to an excelling goaltender, that athlete may also receive offers for other higher-level or more prestigious teams.

**<sup>5</sup>** Joe Baker, "The Trouble with Talent: Problems and Possibilities," International Hockey Convention (lecture, Sweden, January 3, 2024).

**<sup>6</sup>** Joe Baker, "The Trouble with Talent: Problems and Possibilities," International Hockey Convention (lecture, Sweden, January 3, 2024).



# 5 SCALING EVALUATIONS

WHILE DILIGENT AND EXHAUSTIVE EVALUATION of a goaltender is the ideal, this is often of reach out of many amateur organizations, and even some professional ones. The simple truth is that scouts, coaches, and evaluators do not have the time or resources to watch multiple games, skills sessions, combines, etc., for every goaltender they come across. Therefore, organizations need to make prudent decisions as to who they evaluate, how they evaluate them, and for how long.

In order to make effective resourcing decisions, there are two recommended approaches to simplify this system. The first method is to reduce the evaluation criteria, and the second is to select the most efficient evaluation types, or "looks," that will provide the most information for the time spent. Both may be used in tandem or independently.

## By Criteria

The rating system in this methodology encourages evaluators to leave criteria blank and to only rate those traits evident in the goaltender's performance. However, for those without extensive goaltending knowledge, the criteria may still be difficult to understand. Similarly, in a high-volume skills session where

#### HOLISTIC GOALTENDING EVALUATIONS

many goaltenders are being evaluated (e.g. District and Regional Selection Camps), there may only be enough time to observe a limited number of repetitions per goalie, ultimately leading to limited data for and snap decisions by evaluators, with debatable precision.

In these situations, it makes sense to scale back the criteria to the higher-level categories within the system, as demonstrated in *Fig.* 5.

Those lacking position-specific knowledge should still be able to evaluate according to higher-level definitions of these categories. For example, they should be able to define how well a

Fig. 5 - Example of criteria scope for evaluations at different levels.



#### **Scaling Evaluations**

goaltender moves, how consistently they are able to make a save, whether or not they are able to read the play, etc., especially when deciding how these categories factor into the goaltender's ability to compete. Similarly, in high-volume situations, an evaluator should be able to quickly decide on category scoring without having to determine root cause for a specific success or failure.

Grow

Grow

Grow

Grow

Grow

Grow

#### By Evaluation Type

For resource-strapped organizations, the other means of scaling is by choosing those "looks," or evaluation types, that get the most "bang for your buck" in terms of time spent. *Fig.* 6 shows several examples of evaluation type along with the specific categories that are ideally evaluated in those looks:

It should not be surprising that observing games is the ideal method to assess all of a goaltender's traits. While it

Remote/Video Evaluation Background Audit/Research Conversation Evaluator In-Person Observation Modality Dryland On-Ice References Interview Athlete Coach/Other Statistical **Athletic** Skills **Athlete** Personality Development **Event** Game Combine Session References **Interview Assessment Audit Analysis** Feedback Move Move Move Move Save Save Save See See See See Understand **Understand Understand Understand Understand** Impact from Impact on **Environment Environment** Adapt **Adapt Adapt** Adapt **Adapt** Drive Drive Drive Drive Learn

*Fig.* 6 — *Relationship between feedback modality/method and assessable criteria.* 

may be somewhat difficult to assess Learning and Growth Habits, there are still observable behaviors and situations that may indicate some of those traits (for example, in how the goaltender responds to adverse situations).

Another valuable option is to gather first-hand feedback from team coaches, educators, and/or service providers who work directly with the athlete. For youth organizations who select internally, this could be annual coaches' feedback; and for organizations who scout, this could take the form of references, though these should be taken with a grain of salt.

Oftentimes professional and high performance amateur organizations will look at a goaltender's statistics and factor in the level of competition faced. Evaluators may also make assumptions based on the development environment that the athlete came from. For example, if the athlete's organization is reputable with a high proportion of NHL alumni, they may be given higher preference over an athlete from a less-prestigious organization.

While elements like statistics and background somewhat indicate the efficacy of a goaltender's skillset, the evaluation is less about the goaltender themselves and more about their specific environment. In a situation where an evaluator assesses the goaltender's prior environments (development audit), the evaluation is purely looking at how that organization impacted the goaltender (impact *from* environment). Inversely, a statistical analysis shows the impact of the goaltender *on* their environment.

To put in colloquial terms, a statistical analysis asks, "Are they good?" A development audit asks, "How did they get good?" The other modalities highlighted in this system ask, "Why are they good?" The latter question is often the most important when setting up both the organization and athlete for success, while the others rarely shed light on a goaltender's ability to process, decide, and act within those environments. They are merely assessments of the holistic cycle's inputs and outputs.

As organizations narrow down to a short list of athletes, they are often willing to spend additional resources evaluating finalists. In these situations, it may be worth viewing a skills session or inviting the athlete to a training camp, conducting an interview or personality assessment, or doing athletic testing. While this supplemental knowledge can be helpful to determine development pathways, evaluators should still be mindful of their limitations and avoid deducing behaviors that cannot be adequately assessed. Remember: unrated criteria are perfectly acceptable.

## Using Technology in Support

Time is one of, if not the greatest, resource constraint blocking thorough evaluations. Personnel capacity is another such resource, as is money. Put simply, there are only so many people, with limited budgets and limited hours in the day, who can look at a small number of goalies each.

While not a complete remedy, technology unlocks significant capacity for organizations to evaluate more goaltenders in greater depth.

#### VIDEO

Even at the most basic level, recorded video of goaltenders provides access to more looks and to review their performance at a more manageable pace. Many professional organizations already use platforms such as InStat, Hudl, VidSwap, etc. But amateur organizations can still leverage tools like LiveBarn or YouTube to review games. Resourcestrapped youth organizations can even have parents or the goaltenders themselves use mobile phones and GoPro cameras so that there is a library of video available.

#### **O**THER TOOLS

Sport is still an industry that is underserved by technology, but more solutions arise everyday to help. Below are a few additional options to assist with goaltender evaluation:

- EliteProspects and HockeyDB:
   Statistical databases and player scouting profiles
- Stream Cortex: Video breakdown, evaluation, player scouting profiles, and coaching marketplace
- **TeamGenius:** Tryout application and database for organizations
- Stop-It Goaltending Game Day
   App: Goaltender assessment tool focused on shot counts and quality

#### A NOTE ON EVALUATION APPS

In the course of testing this system, we used both a mobile application and paper forms to evaluate goaltenders. Interestingly, we found that when using a mobile application, evaluators were far more likely to rate criteria as beneficial or detrimental versus those who used paper forms.

While this is not definitively a causal relationship, a hypothesis is that mobile applications provide a small dose of positive feedback when a task, such as entering a rating, is completed. This phenomenon is well-documented in the scope of social media applications and likely carries over to productivity applications as well.

A possible conclusion is that evaluating directly via an app may skew data, as evaluators may rate something that is not actually present. Of course, consistency is key across evaluators; if one uses an application, then all should likely use one.

Our evaluators found that the most effective way to evaluate is to use paper, either via raw notes or the provided form, and then transfer those ratings and comments to an app or tool. In this scenario, evaluators can be more present in observing the game without the incentive of tapping a button.



## **Conclusion:**

## **DRIVING MEANINGFUL CHANGE**

North American youth sports are unique among the global community because many of our organizations are for-profit businesses. While for-profit youth sports also exist in other nations, the concept of youth sports is often, first and foremost, a public service. Many countries view sport as a core component of the educational experience, creating more well-rounded contributors to society.

While there is far more nuance to these sporting cultures than the above generalization, it is fair to say that we, as North American coaches within the business model, are pushed toward ruthless efficiency with the resources we are granted. We are trying to foster development for a large number of individuals with limited ice, constrained finances (if any), and while stakeholders continually press for results. The intent of this project is not to restructure the system or debate its politics, but the process of creating this has made evident that something must change.

The first step, proposed herein, is a shift in mindset — to prioritize and find effective, efficient means of bettering the community. To deliver meaningful, growth-oriented feedback to those we evaluate even if those goaltenders are not the right fit for our organization.

## Our Debt as Coaches

We who coach are stewards of the game, who have reaped the benefits, enjoyment, and magic that it brings. For what we have received from hockey, we owe a debt to the next generation to continue, and improve, what this game has to offer.

By being part of this coaching community and by reviewing this material, it is fair to assume that you share in this mindset and have a desire to improve the system. I personally commend you for being an agent of positive change, and for leaving no stone unturned in pursuit of progress.

Communicating our motivation is key to success along this path; just like our goaltenders, our fellow coaches need North Stars to guide us in our pursuits. When we are all aligned on what success looks like — more well-rounded athletes pursuing development pathways appropriate for their own pace — our path to meaningful change becomes simpler and easier to traverse.

## **APPENDIX**

#### RESOURCES AND FURTHER READING

PLEASE SEE FOOTNOTES throughout this manual for directly cited material. The resources below are options for further reading and helped guide the creation of this methodology:

- Aalto, Akseli, and Tuukka Räihä, "Scouting Technical Skills in Ice Hockey," 2012.
- Burnik, Ales, "Physical, cognitive, emotional and psychosocial characteristics of children and age-appropriate on-ice skills for junior hockey players," 2014.
- Coyle, Daniel. *The Talent Code*. London: Random House Business Books, 2020.
- Goldman, Justin. Between Two Worlds: Discovering new realms of goalie development. Middletown, DE: Createspace Independent Publishing, 2015.
- Guay, Eddy, "Creating a Goaltending Development Manual for Belgium Ice Hockey," 2014.
- Koopmann, Till, Irene Faber, Joseph Baker, and Jörg Schorer. "Assessing Technical Skills in Talented Youth Athletes: A Systematic Review." *Sports Medicine* 50, no. 9 (June 3, 2020): 1593–1611. https://doi.org/10.1007/s40279-020-01299-4.
- Mace, William M. "Chapter 2: James J. Gibson's Strategy for Perceiving: Ask Not What's Inside Your Head, but What Your Head's Inside Of." Essay. In *Perceiving, Acting, and Knowing: Toward an Ecological Psychology*, edited by Robert Shaw and John Bransford, 43–65. Hillsdale, NJ: Lawrence Erlbaum Associates, 1977.
- Myszka, Shawn, Tyler Yearby, and Keith Davids. "(Re)Conceptualizing Movement Behavior in Sport as a Problem-Solving Activity." *Frontiers in Sports and Active Living* 5 (May 26, 2023). https://doi.org/10.3389/fspor.2023.1130131.
- Nordman, Samuli, "Goalie coaching manual for Tappara ry," 2013.
- Vandervies, Benjamin. "The Effectiveness of a Psychological Skills Training Intervention for Midget Ice Hockey Goaltenders," 2018.
- Vehviläinen, Simo, "Mental training guide for the ice hockey goalies," 2012.

## DIRECTLY CITED MATERIAL

- Nicholas J. D'Errico and Justin Goldman, Interview with Justin Goldman, personal,
   December 27, 2023.
- Jesse Welling, "Behavioral Scouting An Evaluation Tool for Mental Qualities and Mental Skills in Ice Hockey" (thesis, 2013).
- Chris Button et al., *Dynamics of Skill Acquisition: An Ecological Dynamics Approach* (Champaign, IL: Human Kinetics, 2021).
- Rob Gray, "Key Principles of the Ecological Approach to Skill," Youtube (lecture, Arizona State University), accessed March 1, 2024, https://www.youtube.com/ watch?v=-TUjKAwc9Z8.
- Joe Baker, "The Trouble with Talent: Problems and Possibilities," *International Hockey Convention* (lecture, Sweden, January 3, 2024).
- Joe Baker, "The Trouble with Talent: Problems and Possibilities," *International Hockey Convention* (lecture, Sweden, January 3, 2024).

You can find more resources for this evaluation system — including guides, videos, templates, print-outs, and more — at www.dcreasegoaltending.com.



## ABOUT THE AUTHOR

NICK D'Errico has been a goaltending coach for over a decade, beginning his career with the Allston-Brighton Flyers in Boston, MA. After playing for and graduating from Emerson College in 2014, he became the goaltending director for Starhawks Youth Hockey — now the Central Mass Revolution. He coached both the Varsity 2 and JV Boys' teams at Mount St. Charles Academy in Woonsocket, RI, is a Goaltending Development Coordinator for Massachusetts Hockey, and is a gold-level goalie coach with USA Hockey.

Nick lives in Mendon, MA, with his wife, Collette D'Errico, an accomplished biomedical scientist who is his sounding board and trusted advisor for all things related to goalie biomechanics. He is the proud dad of Damien, a hockey-obsessed toddler, and two affection-hungry rescue mutts, Floki and Freyja.

When not coaching, Nick is the Chief Operating Officer for Stream Cortex, an emerging online marketplace for athlete development.

