Revisiting Goal Setting in NLP

By Dr. Brian Cullen

This article looks at the background of goal setting techniques in NLP and reports on a research study into goal setting which was carried out in Japanese universities.

You may have heard or even told the story that is often used in NLP workshops about the power of setting goals or well-formed outcomes. The story tells how there was a research study at Harvard University in which the professors told their students that people who write down specific goals for their future are more likely to be successful than those who have either unwritten goals or no specific goals at all. In the research study, the professors interviewed people every five years over a period of 30 years. They found something really interesting. You see, the people who wrote down their goals made more money, were healthier, and had better relationships in their lives. And the 5% of people who wrote down their goals also made more money than the other 95% of people. It is an amazing story and acts as a great frame and introduction to teaching well-formed outcomes.

The only little problem with this story is that the research study was never actually carried out. You can find it all over the Internet, and it is cited in research papers and books, but it never actually happened at Harvard University. Nor did it happen at Yale University as is described in some versions of the story, or at any other university at that time. It was only much later that a professor at Dominican University, Gail Matthews, searched everywhere and discovered that the study did not exist. It sounds real and it seems plausible, so we accepted it, but it never happened.

Most NLP trainers could shrug this off and say it is still a good metaphor, but Matthews was so disappointed that it was 'only a metaphor' that she decided to conduct the research study herself, a mindset that the world of NLP could sometimes benefit from. She asked 276 participants from different walks of life to write down their goals. Matthews found that if you write down your goals and take action and accountability seriously, your chance of success is indeed statistically higher. On Matthew's homepage (listed in the references below), there is a link to a good summary of the research.

NLP and Goal Setting

Most readers will probably agree that one of the most commonly arising roles of an NLP consultant, coach or therapist is to help move the client's focus away from current perceived problems and to direct that focus towards achieving goals that can make the 'problem' disappear or become irrelevant. There are many different kinds of goal setting process such as the SMART model (Doran, 1981), the GROW model (Whitmore, 2002), the SPECIFY model (Bolstad, 2002) and some of my own previous work (Backwell & Cullen, 2016). All of these models are useful and help the client to become clearer about what they want and the steps required to achieve the goal.

The idea of setting and achieving goals is clearly important to the field of NLP. Indeed, O'Connor and McDermott (1996, p.1-2) and other sources list it as one of the four pillars of NLP: "knowing what you want by setting goals and outcomes." And although most of us ~~all~~ have personal experience about how goal setting has helped our clients, it also seems worthwhile to consider the work done by researchers like Matthew and others because it can provide more solid evidence about how successful our NLP goal setting techniques and processes actually are in moving people towards their desired outcomes.

While metaphors are undoubtedly useful, this article is an attempt to look just a little deeper than mythical Harvard studies so that we can critically examine the NLP approach to goal setting and hopefully go beyond 'only a metaphor' towards a better understanding of how we can help people to achieve their goals.

Reviewing Well-Formedness Conditions and Goal Setting

The foundation of NLP's goal setting techniques was established early with the concept of well-formedness constraints/conditions (WFC) which arose from Grinder's background in linguistics. In grammar, the term *well-formed* means that words or phrases obey all relevant rules of grammar. In contrast, a form that violates some grammar rule is *ill-formed*. In *The Structure of Magic II*, Bandler and Grinder use the idea of well-formedness to consider how meta model patterns such as *Cause-effect* (e.g. George forced Mary to weigh forty pounds) and *Mind-reading* (e.g. I know what you're thinking) can be considered as violations.

Bandler and Grinder and others linked the concept of well-formedness to goal setting by mapping out the well-formedness conditions for outcomes. The NLP wiki (nlpwiki.org) description is given below:

> At their most basic level, the NLP well-formedness conditions for any given outcome specify that:

1. The outcome must be stated as a positive thing or experience; something wanted, not something unwanted or ended.
2. The outcome must be something that is under the goal seeker's personal control which also implies that the task should not be stated too broadly.
3. The outcome must be specified in terms of multiple levels of sensory experience; it must be described in terms of what can be seen, heard, felt, tasted or smelled.
4. The outcome should be evaluated for ecology; what it will change in the person's life and the lives around them.
5. The outcome should be imagined and experienced in fantasy as fully as possible.

Different goal setting techniques implement these WFC in different ways, and many techniques and trainers add additional factors. For example, Table 1 shows how Richard Bolstad's SPECIFY model incorporates and adds to the WFC.

Step in SPECIFY Model	**Well-Formedness Conditions in NLP Wiki**
Sensory specific	WFC3
Positively stated	WFC1
Ecological	WFC4
Choices increase	This is not explicitly stated in the WFC, but brings in the NLP idea of offering more choices so that the client can make better choices.
Initiated by self	WFC2
First step identified	Not specified in WFC, but clearly a useful addition for getting people into action right away. It seems similar to the concept of 'next step' in *Structure of Magic II*.
Your resources identified	This brings in one aspect of WFC5, and also expands it to include Erickson's idea that the client already has all the resources needed to succeed.

Table 1. The SPECIFY process for goal setting compared with the well-formedness conditions for outcomes

The SPECIFY model encodes the WFC effectively, apart from perhaps the second half of WFC2 which states that "the task should not be stated too broadly." This scope of task is usually well-handled by NLP practitioners through chunking or framing techniques. Other goal setting techniques in NLP encode the WFC and additional conditions in their own ways. Most techniques have been reported as successful, at least anecdotally. But what has not been clear is whether our NLP goal setting techniques can be supported by research or how research can inform our techniques, and so this article now turns briefly to research on goal setting.

Informing Our Techniques with Research into Goal Setting

There is little research into goal setting within the field of NLP (three citations in the NLP Research Database are described in Appendix 3), but when we look further afield into research on management and work performance, there are quite a lot of relevant studies. One influential study by Locke et al (1980) summarizes many goal setting studies which were carried out between 1969 and 1980 (mostly presumably not related to NLP). Their meta-analysis demonstrated that "in 90% of the studies, specific and challenging goals led to higher performance than 'easy goals', 'do your best' goals, or 'no goals'."

As we all know, setting goals does not automatically translate into action. Many years ago, I had a study partner who had the most beautifully designed study plans I have ever seen, yet he never managed to actually take any action and failed almost every test. Locke's analysis of goal setting studies suggests several mechanisms through which goals can lead to action and improved performance. These are shown in Table 2 along with sample NLP techniques that we can use to promote each of these mechanisms.

Mechanisms for how goals can lead to action (Locke et al, 1980)	**NLP Techniques for Promoting these Mechanisms**
Directing attention	Framing, chunking, meta-model questions, raising sensory acuity of behaviours and internal representations
Mobilizing effort	Making the person aware of existing resources, values elicitation, addressing limiting beliefs, etc.
Increasing persistence	Milton model for chunking up to core values,

	chunking down to a list of doable actions
Motivating strategy development	Strategy installation and rehearsal

Table 2. Mechanisms for how goals can lead to action and NLP techniques to promote them

Good NLP practitioners are already using these skills to promote these natural mechanisms, but Locke's research highlights and reminds us where goal setting can fail to translate into action and where we may need to focus our energy. For example, supposing a person wants to give up smoking and we carry out a goal setting activity such as SPECIFY, yet the person doesn't give up smoking, where is the translation from goal to action failing? Is there a need to direct attention better, to mobilize effort more, to increase persistence, or to help the client develop specific strategies? NLP offers us tools that we can use in all these situations once we are aware of them and keep them in mind. This is a good example of what we can learn by remaining open to the wider field of research in psychology, management, and other fields.

Goal Stepping

As one little contribution to this research, in this section, I would like share a research study on goal setting that I carried out recently. This study used a goal setting technique called *Goal Stepping*. I have described it in more detail in a recent newsletter of the Society for Mental Space Psychology (Cullen, 2017).

In most aspects, this goal stepping technique is similar to SPECIFY and other goal setting techniques in NLP. One additional aspect of this technique that is not included in some NLP goal setting techniques is the location of the goal in the physical space around the client. This representation of goals and actions in physical space is supported by somatic NLP, mental space psychology, timeline work, and also by modern theories of embodied cognition.

Embodied cognition suggests that "cognitive processes are deeply rooted in the body's interactions with the world" and that humans routinely "off-load cognitive work onto the environment" (Wilson 2002:625). We have limits on our cognitive abilities (e.g. limits on attention and working memory), and so we naturally exploit the space around our bodies to reduce the cognitive workload. A simple everyday example of this is when we hear someone say "on the one hand… and on the other hand…" and literally use the space on

the left and right sides of their body to organize their thinking. Despite evolution and the vastly increased cognitive functioning of modern humans over our primate ancestors, our neural resources are still primarily focused on perceptual and motoric processing, and our cognitive activity still consists mainly of real-time interaction with our environment. In theories of embodied cognition, human cognition is not seen as something that is centralized in the brain, but rather has deep connections to the movements of our bodies.

For these reasons, laying out our goals and actions in physical space makes sense because "we make the environment hold or even manipulate information for us, and we harvest that information only on a need-to-know basis" (Wilson 2002:626). Setting up the goal and the steps towards the goal in a physical space can begin to both metaphorically and literally get clients moving towards their goal more effectively than writing out a list while sitting in the fixed position of a chair.

Position of Goal and Direction of Motion

If we accept the idea that using space to organize our goals is a beneficial one, the question arises as to the location of our goal within the physical space and the direction of motion, i.e., whether we should start at our goal or start at our current location. Following the basic principle of pacing the client's current map of the world, the location of the goal should normally be specified by the client. I generally have the client throw a pen or other small object and set the location where the object lands. This allows the client to set the overall direction, but also introduces a little bit of randomness into the location of the goal, a situation that represents the mixture of human agency and randomness that exists in the real world.

With regard to the direction of motion, one way to think about goals is to begin at your current situation and then to consider the actions or steps that you need to take between now and achieving your goal (Figure 1). This stepping forward towards a goal can be a useful method but sometimes the distance between you and your goal can seem daunting. For example, if you are just starting the piano and your goal is to play a show of one hour in length in front of a live audience, you may become overwhelmed by the idea of how to get there and become demotivated.

Figure 1. Starting at your current situation

An alternative method is to start at your goal and think how you can step back to your current position (Figure 2). This can often be more fun, more motivating, and more effective. One reason is that you can get a sense of the excitement that you will feel when you achieve your goal and you can bring that back to motivate you. Starting with your goal also follows Steven Covey's useful advice in the book *7 Habits of Successful People* to "start with the end in mind," and it allows you to see much more precisely what the end result of your actions need to be and therefore to take more useful actions.

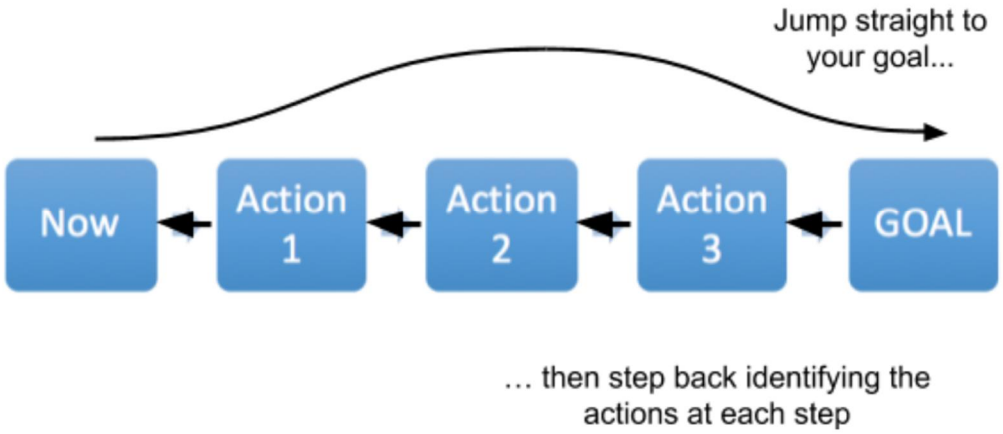


Figure 2. Starting at the goal and working backwards

While neither of these methods is necessarily better than the other for every client situation, my own work has generally convinced me that starting at the goal and stepping back is the more effective method in helping people to achieve goals. With this in mind, the goal-stepping exercise below uses this stepping back approach. A simple version of the goal-stepping activity is given in Appendix 1 for the context of therapy/coaching. The fuller version of the activity as I use it with students in the classroom is available elsewhere (Cullen, 2017).

The Research Context

The goal stepping exercise was used in the context of my work teaching English as a foreign language in two universities in central Japan (n=58). The activity also served as a language practice activity, and students took turns carrying out the role of coach and client in the exercise. Following the class, students were required to complete a survey listing their goal, their steps toward their goal and their rating of several statements on a scale of 1-10 (shown in Appendix 2). After 6 weeks, they carried out a follow-up survey. The questions were designed to allow for a simple before-after comparison on three areas:

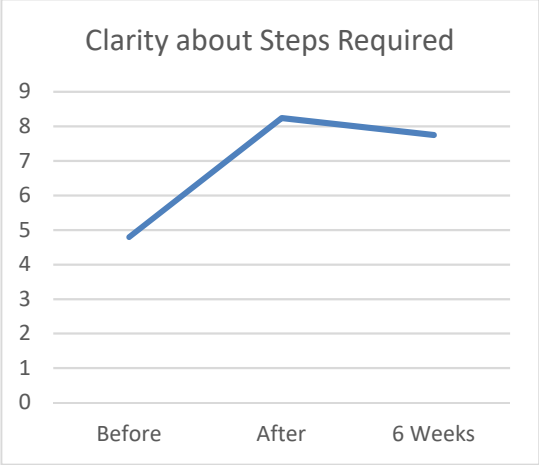
a) clarity about steps required to reach goal,

b) motivation towards the goal,
c) and belief that the goal is achievable.

An additional question examined whether they found physical movement to be useful in the activity. Questions in the six week follow-up questionnaire also aimed to identify the amount of effort applied and the progress achieved towards the goal.

Results and Discussion

The figures and tables below summarize the results of the study.



	Before	After	6 Weeks
Mean	4.7983	8.24	7.75
SD	2.21	0.99	1.58

Figure 3. Level of clarity about the steps required to achieve the goal

	Before	After	6 Weeks
Mean	5.51	8.55	8.05
SD	2.07	1.19	1.81

Figure 4. Level of motivation towards the goal

	Before	After	6 Weeks
Mean	5.75	7.96	8.02
SD	1.99	1.52	1.79

Figure 5. Level of belief that the goal will be achieved

	Effort Towards Goal	Progress towards Goal	Achieved
Mean	5.51	4.93	
SD	2.63	2.53	

Table 3. Effort and progress towards goal

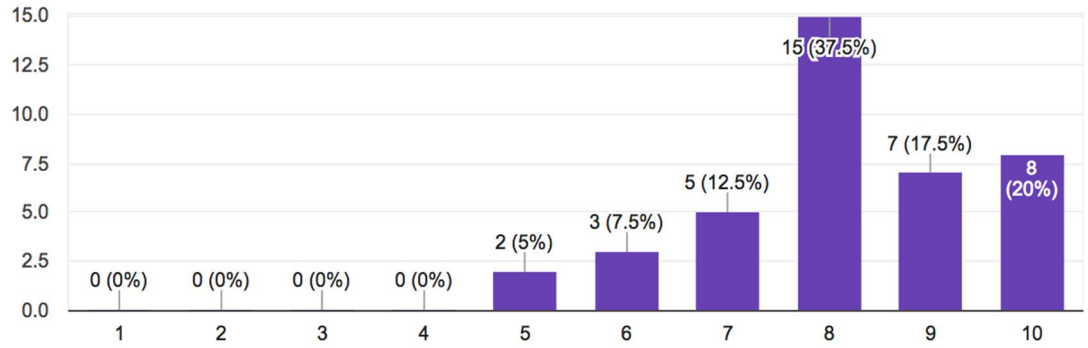


Figure 6. Perceived usefulness of setting the goal in physical space and moving

a) As can be seen in Figures 3-5, there is a significant increase in perceived clarity, motivation, and belief with respect to the goal immediately after the exercise. In the six-week follow-up, these gains were mostly retained. This suggests strongly that the goal stepping exercise and similar NLP goal setting exercises are having a significant effect on people's perceptions towards their goals.

b) Table 3 focuses on another important question–whether these increases in clarity, motivation and belief translated into taking action. These results were less impressive (increased effort: mean=5.51; making progress towards achieving the goals: mean=4.93), and clearly the stated goals were not receiving sufficient effort. It is interesting to consider which of Locke's four mechanisms (shown in Table 2) to translate goal into action were insufficient: Directing attention, mobilizing effort, increasing persistence, or motivating strategy development. In future research, the insufficient element could perhaps be identified in the follow-up questionnaire or individual interviews.

c) Figure 6 shows the perceived effects of setting the goal in physical space and moving rather than carrying out the goal seated. While the use of physical space is seen as beneficial (mean=7.89), no explicit comparison was made between a seated goal setting exercise and a movement-based exercise.

Conclusion

This article has reviewed the background of well-formed outcomes in NLP. While there is little research on goal setting within NLP, there is clearly much to be learned from research in other areas such as coaching or management studies. Opening ourselves up to research findings from other areas can allow us to become aware of more possibilities and continue to enrich NLP while still retaining its primary methodological focus of modelling.

From the study described in this article, it is clear that goal-stepping has strong positive effects on clarifying the steps required to carry out goals, the motivation to do so, and the perceived likelihood of achieving the goal. Most of the benefits from the goal-stepping activities would presumably also be found in other NLP goal setting techniques. Use of physical space in a goal setting exercise was also perceived to be beneficial. However, the translation from goal to action was shown to be relatively low in this study and is something that we should keep in mind and address as we use NLP to help people to achieve their goals.

Biography

Dr. Brian Cullen is an associate professor at Nagoya Institute of Technology in Japan. He is a trainer of NLP and hypnosis and other modalities. He has written many books and research papers. He is also a musician and composer and has written many NLP-influenced songs. More information is available at www.briancullen.net.

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Webpages

Gail Matthew's homepage with her research summary: https://www.dominican.edu/academics/lae/undergraduate-programs/psych/faculty/assets-gail-matthews/researchsummary2.pdf

Appendix 1 - Goal-Stepping Activity

Part A: Help the client to visualize the goal

In most cases, this goal will emerge naturally in the course of the session. If not, you could use words such as the following or any of the goal setting models listed in the introduction to this paper, or your own usual patter. Take notes on the client's answers so that you can utilize them later.

> "Think of a goal that you would like to achieve. It can be any area of your life, for example health, study, future career, money, relationships, or some other area. When do you want to achieve it? It is also good to think about the evidence that tells you that you have successfully achieved your goal. For example, what do you see, hear, feel, touch, or say to yourself when you have achieved your goal?

Part B: Physically move to the Goal and then step back to Now

1. Bring your goal to mind again.
2. Imagine your goal is located in a space at least two meters away. Which direction do you think your goal is in? You might like to throw a coin or other small object to mark the position of your goal.
3. Walk from Now to your Goal. Step into your Goal.
4. As you stand at your Goal, imagine achieving your goal as clearly as possible. *[Read back your notes on the evidence that the client gave]*
5. Take a step back. What is the action that needs to happen at this step? *Write down the action that the client says.*
6. Repeat step 5 at least three times or until the client arrives back at the original position
7. Have the client rewrite the list of actions.
8. Help the client to add missing details or chunk down any actions that are too big into smaller actions.

Options

- Have the client walk forward from Now to the Goal imagining doing the actions at each step.
- If appropriate, have the client write a date for each action.
- Tell the client to find a picture to remind them of the goal and to stick it on the fridge or bedroom door or somewhere else at home to help them remember the goal. Stick up the list of actions next to the picture.

Some Useful Framing Metaphors

When carrying out this activity in a small or crowded space such as a classroom as was done in this study, different groups are likely to get in each other's way and to even cross the path of another group's goal. While this seemed like a hindrance at first, it can actually be utilized as a metaphor for the fact that all of our goals in life may put us in the path of other people's goals. Similarly, obstacles in the environment such as desks or chairs need not necessarily be moved out of the way to make the process easier. Instead, the client/student can be encouraged to view them as metaphorical representations of the obstacles that occur in life as we attempt to carry out our goals.

One other little fun metaphorical trick is having the client throw a coin or other small object to mark the position of their goal. This gets across the idea that goals do not have to be exact as long as we know that the right direction to move towards them. These types of metaphors can be used equally well in single-client situations or group situations.

Appendix 2 - Questionnaire

Please answer the questions using the scale of 1-10.

1=Not at all 10=Absolutely

Several of the questions ask you about BEFORE and AFTER the activity.

1. ___ Before the goal-stepping activity I was clear about the steps required to reach my goal.
2. ___ After the goal-stepping activity I am clear about the steps required to reach my goal.
3. ___ Before the activity, my motivation level was …
4. ___ After the activity, my motivation level is …
5. ___ Before the activity, I believed I was likely to achieve my goal.
6. ___ After the activity, I believe I am likely to achieve my goal.
7. ___ Physically moving and stepping helped me to identify the required steps to achieve my goal.

Appendix 2 – Articles on Goal Setting in the NLP Research Database

The NLP research database is a collection of over 350 research articles compiled and maintained by Kammer & Hücker, and it is a good starting point for identifying research within NLP. Three relevant studies from the database which relate to goal setting are summarized below.

a) Biswal et al (2005)

This "described briefly about the theories and assumptions propagated by NLPers, the fundamental presuppositions, and about different states and strategies that can be used to

achieve the desired outcomes set by the individual himself/herself". This is from the abstract, and I was unfortunately unable to locate the full article to determine if there was more than a theoretical description.

b) Doemland (2001)

This study provides a much more informative "univariate and multivariate analysis of 13 linguistic patterns, goal statements, and level of athletic achievement" and "results indicated that world ranked athletes generated a statistically significantly greater number of well-formed goal statements than non-ranked athletes." Again, I was unable to locate the full article.

c) Skinner and Croft (2009)

The authors describe a well-designed study which used NLP to guide university students in setting goals to write their graduation dissertations. They explained the well-formedness conditions for outcomes in order to help students to "identify both motivation and means, and are then encouraged to take up the opportunity of making the first step" (p.38). Data was collected using interviews and a focus group, and their qualitative interview data show clearly that the NLP intervention was deemed to be useful. For example, one student comment in their study highlights the usefulness of NLP goal setting techniques in raising awareness of available resources: "You're aware that you've got online journals, you've got the library, you've got the tutors, you've got your colleagues, but I mean being aware of them and utilising them are two totally different things, poles apart" (p. 36). Skinner and Croft also give quantitative results which "indicate that students who engaged with the workshop series performed better in the dissertation, and also in their overall degree classification, than students in their cohort who did not engage with the programme" (p.39).