

## **Intention/reflection practice in higher education**

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### **ABSTRACT**

Educators at every level have used self-reflection activities to help students uncover and enhance knowledge gained during learning activities. A complimentary practice of establishing intended learning outcomes has also been promoted as contributing to learning outcomes. Recently, a new practice has been developed and is currently being tested that combines these two instructional methods. This practice, called Intention/Reflection, provides a seamless path through the entire learning experience by encouraging students to identify and track learning gains. Several constructivist and student-centered educational theories and practices influenced the development of Intention/Reflection. This practice is an educational process designed to promote critical thinking both before and after a pre-planned educational experience. The learner designates his/her own learning outcomes by outlining what they expect to extract from the experience. This practice is not intended to take the place of instructor-defined course goals and objectives. Rather it is designed to enhance them. To date, this practice has been used in several learning environments. Preliminary results demonstrate strong construct validity for the practice, and an enhanced learning experience for students. This paper describes the current Intention/Reflection framework. Researchers continue to work toward identifying core questions and structures that would yield the most overall positive learning experience for students.

Keywords: reflection, Intention/Reflection, learning goals, higher education

## OVERVIEW

The framework of Intention/Reflection is an important learning process to incorporate into the student experience. This is an educational process designed to promote critical thinking both before and after a pre-planned educational experience. The learner designates his/her own learning goals (sometimes in rough form) by outlining what they expect to extract from the experience. The development of this practice was influenced by several theories, methods, and practices that will be shared further below.

## REFLECTION

The act of purposeful reflection in education has long been regarded as an important part of the learning process. Education theorists and practitioners, including Dewey, Habermas, Kolb, Brookfield, Schon, and many others, have written about the positive effects of cognitive reflection in the learning process. Even the work of Piaget, Vygotsky, and Bruner can be connected to reflection as a means of learning.

Dewey (1933) defined reflection as "... active, persistent and careful consideration of any belief or supposed form of knowledge..." and the conclusions ultimately drawn from that analysis. Since that landmark publication 80 years ago, thousands of research-based books and articles have demonstrated a wide array benefits when learners are encouraged to reflect upon their experiences. The act of critically analysing new information and experience, combined with one's prior set of knowledge and experience, and the reconciliation of differences, is what constitutes new knowledge, according to constructivist learning theory. (Piaget 1961/1969, von Glasersfeld, 1984). Despite this important step forward for education, the practice of reflection has still not garnered wide spread use among college faculty (NCES, 2002).

Reflective writing, although not a practice in all academic courses, does have merit in how students connect with what they have learned. According to a reflective journal design by Carlson et al (2007), students who consider their work are more likely to engage in critical thinking and connect course concepts to practical applications. The benefits of reflection also help students in how they absorb information, both within and outside the scope of course content. Journal writing can become a thread from one experience to many others (Cicero 2006, Maloney & Campbell-Evans, 2002).

## INTENTION

In contrast to reflection (but also complementarily, as will be shown), is the practice of intention – targeting specific knowledge to be gained before engaging in a given learning experience. The practice of intention within this paper has been inspired by several theories and practices, including:

- Inquiry-based learning: allows the learner to follow a line of questions to arrive at a conclusion (usually pre-determined by the instructor).
- Formative assessment: helps to define the scope of students' existing knowledge, and to understand student progress during a given period so important changes may be made in the learning environment to enhance the overall experience.
- Learning objectives: the first and foundational aspect of a course, it helps instructors frame appropriate assessment methods and learning activities.
- Metacognition: this is knowing about knowing – it relates to learners' self-concept about themselves as a learner (what they know and don't know, how they learn, what are

important traits of an ideal learning environment, why any given set of content is important to them, etc.).

- Learning contracts: a set of shared goals and objectives outlined and agreed upon jointly by the instructor and the learner.

It is important to note that all of these practices could be classified under the broad term, “student-centered” learning, in which the onus of learning is on the learner. Acquiring knowledge is an active process – unique to each individual – based on past experiences, frame of reference, and personal history. Each of the above theories and practices help frame students' learning experiences.

## **INTENTION/REFLECTION PRACTICE**

A distinct practice, called Intention/Reflection, has been developed based on the above information. This practice is novel in several ways.

First, Intention/Reflection is an entirely student-centered practice. By contrast, previous education practices around content have been entirely, or mostly, teacher-centered. Learning goals and formative assessment methods are based on the instructor’s view of what is most important. Intention/Reflection activities account for learning goals established by the instructor, but also promote the mindful creation students’ own personal set of learning outcomes.

Second, this practice is a seamless whole. The learning experience, from beginning to end, is connected together directly and obviously, through this practice. Previous practices have made attempts at a similar objective, but have been disjointed and somewhat inaccessible for most learners to notice. Intention/Reflection asks learners to identify what they will learn and how they will learn at the beginning of the experience, and expressly states that they will be asked these same questions at the end of the experience.

The researchers have used the Intention/Reflection practice in various higher education settings to date. These settings have included various online courses and international interprofessional courses. The most recent Intention/Reflection exercise took place for students involved in a health fair at a Children's Museum. Each group of learners who has used this practice has provided positive feedback regarding the overall process. It helped the students align personal thoughts to the upcoming experience and offered an opportunity for students to reflect on what they learned through the experience, and how they will approach it the next time.

## **THE PROCESS**

Simply put, Intention/Reflection is a series of questions designed to facilitate a critical examination by learners to help identify what they want to learn, and how they are going to learn, depending on a given learning experience. The Intention/Reflection questions are separate, but may be related to, the course objectives outlined by the instructor. (This practice is not intended to take the place of instructor-defined course goals and objectives. Rather it is designed to enhance them.) Students are encouraged to identify these uniquely personal learning goals, and develop methods to acquire the desired knowledge or skills, using the course content as a framework. Note that the students’ desire to learn is based purely on their own set of goals, questions, desires, and frames of reference. The course content simply provides a vehicle with which to achieve these goals.

This additional knowledge and skill generation can be gained in any learning experience. However, the experience of the researchers shows that learners rarely identify potential learning

opportunities outside the specified learning goals as outlined by an instructor. This practice specifically and intentionally asks learners to identify – independently of what is outlined in the course content – what they would like to gain from the experience.

The practice starts before the learning experience. Students respond to a set of questions regarding their specific intentions for the experience. Questions can include:

- What do you intend to learn from this experience?
- What do you hope to gain from this course?
- How will you ensure you achieve your intention for this experience?
- How will this opportunity affect your future profession?

The timeframe for intention questions vary based on the learning experience. For example, the intention activity for the international travel course mentioned above took place two weeks prior to departure. However, the intention activity for a one-hour speaker or lecture may take place in the first few minutes of that hour. The timing of this portion of the practice depends on the framework of the learning experience.

After the learning experience, the reflection activity occurs. Again, a specific set of questions, which mirror the intention practice, are presented to learners. Some examples include:

- What did you learn that was most surprising to you?
- To what degree did you achieve your learning intention?
- How has this learning experience changed your perspective?
- What steps did you take to ensure your team was prepared to succeed?

These questions are designed to stimulate critical self-examination and foster a sense of ownership in the learning process. Additional questions may be added, depending on the learning experience and outcomes desired. It may be appropriate to simply have an open text area for students to record other personal reflections. The important guideline is that the reflection questions tie directly and specifically to the Intention questions from prior to the learning experience.

Additional reflection points may be added in the middle of the learning experience if the overall time span of the experience deserves mid-point reflection and correction. For example, the international course noted above was 3 weeks in length, and included one mid-point reflection to allow students the opportunity to refocus and adjust their learning outcomes accordingly.

As mentioned earlier, researchers are continuing to identify the core structure and questions affiliated with Intention/Reflection to create the optimal learning environment for students.

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