

Active Teaching and Learning Success: A big picture view

Presently we seem to be in the tail end of a transition period where dialogue and discussion around learning is passionately debated and being re-evaluated, so much so that some teachers I talk to cringe at the mention of the word pedagogy. If we look at higher education, painting with very broad strokes, we seem to be transitioning from an industrial concept of learning that sees knowledge as a product that can be replicated by

initiating some sort of data transfer from an existing expert to a new student who in turn will create new ideas and repeat the process. The thought that with some simple manipulation, and by finding a suitable student open to absorb the required knowledge, this learning "object" can be delivered with ease. This perspective depends on an abstraction of knowledge and learning as a commodity item that is separated from persons and context. Although there is a collective understanding that education is not even remotely this simple, this idea is still pervasive in the structure and actions of ourselves and our institutions. This idea has a compelling attraction in that it is simple, easily systemized, monetized, and replicated. Goals are seen as clearly defined and easily measured, and as most people can conform to social pressure, results can still be seen. Great dialogue and effort has been focused on changing this over simplified view of knowledge and learning, guided and supported by solid scientific research. Unfortunately habit persists, further reinforced by the thought that many types of learning can be made to fit within this simple and efficient view of acquiring knowledge, and that somehow creative thought will emerge once sufficient data is infused. This culture of objectifying learning is changing. Dialogue surrounding education seems to be settling into some semblance of agreement as more comprehensive "person centered" ideas of knowledge and learning take hold within our culture, and a pedagogy of active learning based on the premise of the importance of encouraging students personal engagement comes to the forefront as the necessary action for learning success. However, attempting to filter through the noise within the education industry continues to be a challenge. Understanding how new perspectives affect the institutions we are familiar with, and teaching methods presently in use, it is not necessarily clear how to proceed with concrete actions as we tend to fall into the habit of compartmentalizing our situations and environment. The first step to creating an action plan requires a big picture view of what is necessary in order to further revitalize our institutions, tools and methodologies. Keeping a big picture view in mind will help to prevent being side tracked into dysfunctional results.

Research on education has grown steadily since the 1960's. One very significant effort to collect and provide access to education research is a collection call "How college affects Students" by Ernest T. Pascarella, Patrick T. Terenzini, with the latest volume updated in 2016 called "How College Affects Students: 21st Century Evidence that Higher Education Works, Volume 3" (Matthew J. Mayhew, Nicholas A. Bowman, Alyssa N. Rockenbach, Tricia A. D. Seifert, Gregory C. Wolniak). Using this volume as my key resource, supplemented with some additional content, I have summarized what I see as a

useful way to focus on what current and past research says about learning success. The over-arching theme which emerges is the idea that learners are complicated people that are highly affected by their physical environment, social environment, and their personal psychological and physical makeup. How and where content is presented, what the expectations are surrounding the content, the framework surrounding the content, and the perception of difficulty of the content itself has significant impact on the effectiveness of learning. This process is not a passing of information, but a human interaction based in relationship; with all the complications this implies. The central relationship of a learner to an instructor makes a significant difference. The ideas that stand out the clearest in the literature is the perspective that the instructor is inviting learners to engage with the material that is being presented, wrapping it in a framework that makes it approachable, tagged with the validation that it is valuable and worthy of being learnt, communicating the affirmation that the learner has the ability to master the content. Good teaching matters and is an essential aspect of good learning. An instructor not only builds the framework of a

INSTRUCTORS - Good teaching REALLY MATTERS!

- a. Encouragement to engage
- b. Provide good feedback
 - i. Needs to be purposeful and consistent
 - ii. Needs to be content driven
 - iii. Feedback is "one of the most powerful influences on learning, too rarely" used. Hattie, Timperley 2007.
- c. Provided opportunity to reflect
 - i. Effective reflection as a pedagogical strategy requires careful structure that is patient and thorough. (Dewey)
- d. Actively engaged students in the learning process
 - i. Active student engagement is essential for learning
 - ii. Active learning pedagogy works by creating engagement
 - iii. Not the only way but proven to be consistently successful
 - 1. Traditional lectures have proven to be ineffective becomes a passive exchange of teacher notes to student notes with little to no mental engagement
 - 2. Both students and instructors tend to be highly resistant to abandoning lectures likely due to the format providing the appearance of learning and the simplicity of delivery for both
 - 3. No singular definition or expression of active learning was necessarily more powerful than another. Rather, active learning is a component of a teacher's deliberate practice of inviting students to think and act in ways consistent with disciplinary norms and methods were quite effective at spurring student learning and development. (HCAS pg 593)
- e. Focus on assignments, directed tasks, and group work has proven to be effective
- f. Focus on the encouragement of preparations and planning before class has proven to lead to learning and development gains
- g. Course material needs to be challenging and do-able
 - i. Too easy or too hard are equally ineffective
 - ii. Delicate balance as this is dependent on individual and environmental factors
 - 1. ex: ESL, stress, poverty, culture, community support
 - iii. The perception is as important for engagement as reality
 - 1. A perception of too hard disengages as well as a perception of too easy triggers low engagement
 - 2. Actively surveying and managing perception is important
- h. Support is crucial
 - i. Learning Online or Offline
 - 1. Success is based on level of support (guidance) in understanding the course material
 - a. online pedagogies that encourage quality interactions with with faculty and peers helped students make subject matter gains.
 - ii. If support is lacking in individual student's emotional, financial, cultural, mental needs, as well as community, and direct course support, then learning suffers
 - iii. Focus on the student as a full and complex human person is essential
 - 1. Learning is complex and needs to be evaluated with a multilevel model - simple measure of success is not adequate (HCAS-579)
 - a. Understanding that learning involves intellectual, cognitive and moral development as well as psychosocial and attitude change
 - b. Holistic approach needed

course, but hopefully teaches within an inviting and safe environment, striving to communicate an encouraging attitude and delivering an inspiring pitch. **Teaching is a skill that** requires knowledge and training and a high level of support.

Learning does not thrive in isolation but exists within a community that provides context and support. This wider relationship directly impacts learning success. Research has helped identify the characteristics that should exist within this larger learning environment and how these relationships impact individual learners. The chart to the right outlines the details.

Presently it seems that less effort and spending is focussed on examining, defining or shaping learning communities in comparison to spending in other areas within the learning ecosystem. This seems to indicate a need to create an active plan at a classroom level, a departmental level, and an institutional level to consciously decide learning values and goals, and actively craft a method to implement these goals within a community setting. Many teachers and small groups within the higher

- 1. Identity
 - a. Clarity of purpose/s
 - i. What are you trying to accomplish
 - b. What are you communicating
- 2. Sense of belonging
 - a. Basic human need
 - b. Necessary pre-condition for higher order needs (Maslow 1962)
 - i. Desire for knowledge
 - ii. Understanding
 - iii. Self-actualization
 - c. fundamental motive for behavior
 - i. Stimulates goal-directed activity
 - ii. People are compelled to act to satisfy belonging
 - d. Heightened importance conditions
 - i. Newcomer in an established group
 - ii. Needs of late adolescence 18 to 24
 - iii. Marginalized cultural sensitivity acceptance needs are heightened
 - e. Related to or consequence of mattering
 - i. Feeling that doing and being matter
 - 1. Person and action has value
 - 2. Discerning a sense of right or wrong
 - 3. The 5 dimensions of mattering by Rosebberg McCollough
 - a. Attention noticed in ways that command interest
 - b. Importance object of another's concern
 - c. Dependence feeling needed
 - d. Appreciated feeling respected
 - e. Ego extension believing others share in your success.
 - f. Social identity challenges to belonging
 - i. Needs flexibility as one size does not fit all
 - g. Belonging has strong links to
 - i. Academic performance
 - ii. Sense of well-being
 - iii. Physical health
 - iv. Happiness
 - v. Community service
 - h. On campus requirement for belonging to be successful
 - i. Strong affiliations with
 - 1. Faculty
 - 2. Staff
 - 3. Other students
 - i. Belonging conditions need constant work and renewal
 - i. Not static

3.

- ii. Needs to be constantly re-evaluated
- j. Checks and balances need to be in place to counter isolation
- Intergroup Contact (teacher student & student student)
 - a. Constantly re-examine and countering of pre-judging of students' abilities based on race, class, gender, and other social identities

COMMUNITY

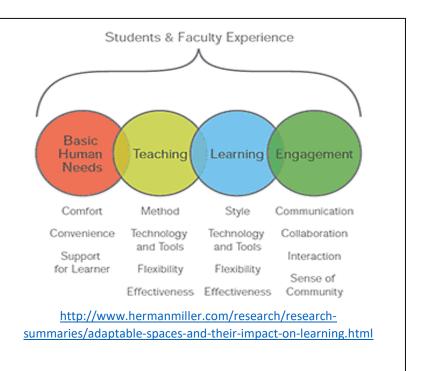
education environment have transitioned towards a more person centered learning environment but it still seems that many higher education community values from an institutional level are moving slower; with many strategies still stuck on a survival of the fittest perspective that expresses a view that only the best who can traverse a difficult environment should succeed. While it is true that challenge is required, this perspective downplays the responsibility of an institution, department, and instructor to create an environment of success and attainability. It would seem that a better perspective might be to look towards providing a support environment that encourages the survival of the socially mature, the cooperative, and the supportive, with clear goals of learning success. Setting a focus on supporting and teaching emotional maturity and social cooperation would seem to be a more sensible way to assist learners in accomplishing learning goals and general life success, and through this academic success. This idea seems to permeate clearly

INSTITUTION

- 1. Co-curricular Engagement
 - a. Key for identity development and positive psychosocial development
 - b. Recommended that educators think strategically as to what resources could be accessed to support student/instructor/faculty interaction
 - i. skills
 - ii. information exchange
 - iii. logistics and co-ordination
 - iv. leadership
 - v. career related activities
 - vi. formal and informal networking
- 2. Diversity support needed
 - a. Learning and development appears to be more related to the nature of the diverse interaction in the classroom rather than the number of interactions
 - Recommendation to consider providing opportunity to openly express their racialized identities, engage with other students across lines of difference, resolve cognitive disruptions in healthy ways
 - Leaving to chance and within unstructured environments can lead to reducing the effect of the benefit higher education provides in peer interaction stimulating cognitive dissonance leading to acceptance values and personal growth
 - 2. Educators are recommended to commit to helping students learn how to approach their peers with the goodwill and openness necessary for constructive exchanges to evolve in classroom and out-of-class settings
- 3. Indication of a need for a strong institution based retention policy
 - a. Provide innovative formal and informal networking spaces for students
 - b. Programmatic retention efforts that combine multiple components seem to be far more influential than individual efforts
 - i. Supportive environment as well as supportive programs
 - c. Need for packaged initiatives that deliver guidance and support
 - d. Move away from an attitude of "look to your left, look to your right. Next year one of you will not be here".
 - i. Sink or swim needs to become we will help you swim
 - ii. University bears a lot of responsibility for providing students with the support they need to achieve their goals
 - 1. Additional info: How College Affects Students pg594
 - <u>http://www.ellucian.com/Insights/Retention-and-</u> <u>student-success--Implementing-strategies-that-make-</u> a-difference/
 - e. Shift intervention efforts to midterm rather than final grades as a signal for assistance
- 4. Learning environment is growing in complexity and "one size fits all" perceptions tend not to reflect student realities
- 5. Learning physical environment support
 - a. Crucial need to provide resources to enable an environment conducive to community and identity building both offline and online

through the *Community* and *Institution* sections as illustrated on the list to the right.

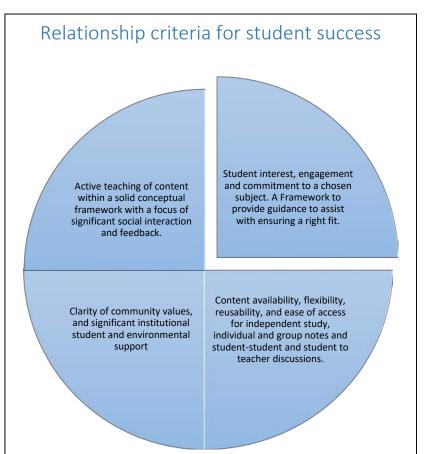
Another aspect worth highlighting is the compelling need for a supportive physical environment. A quick search on google reveals a massive rush that many higher learning universities are engaging in to convert existing old lecture halls to active learning spaces. Both anecdotal evidence from teaching experience as well as serious research seems to point to the importance of clearly examining and understanding what is necessary to support learning through a physical environment. On the Educause website there is a significant amount of research based content to provide guidance on creating successful learning spaces:



https://www.educause.edu/research-and-publications/books/learning-spaces

The top chart to the right (from an article by Hermanmiller.com) focuses on the human experience and how it relates to the activities within the space with the goal to guide discussion on assessing and designing learning spaces. What is immediately obvious is how completely interdependent these relationships are and how crucial the roll of choosing value will influence decisions as simple as the type of chair to purchase.

The key concept to consider when approaching active learning and teaching is understanding that the exchange of knowledge and understanding is not abstracted from the human person, but a process that lives in relationship. The pie chart to the right summarize this relationship from the perspective of student needs for learning success. It is crucial to understanding education as a human social activity involving all



aspects of the human person. If we approach education with this focus, the likelihood to succeed in stimulating growth, knowledge, and value, increases significantly, which will positively affect the success of any classroom, program, department or school.